Education Committee

Thursday, March 30, 2023
9:00 a.m. – 10:30 a.m.

Great Hall
UW-Stout Memorial Student Center
302 10th Avenue East
Menomonie, Wisconsin
& via Zoom Videoconference

A. Calling of the Roll

B. Declaration of Conflicts

C. Proposed Consent Agenda:
   1. Approval of the February 9, 2023 Meeting Minutes of the Education Committee
   2. UW-Madison: Approval of a Bachelor of Arts and Bachelor of Science in Chicana/o and Latina/o Studies
   3. UW-Madison: Approval of a Master of Science in Business: Data, Insights, and Analytics
   4. UW Oshkosh: Approval of a Bachelor of Science in Biomedical Engineering
   5. UW-Stevens Point: Approval of a Bachelor of Science in Conservation and Community Planning
   6. UW-Stevens Point: Approval of a Bachelor of Science in Environmental Education and Interpretation

D. Host Campus Presentation by UW-Stout: "Addressing Employer Needs for Talent and the Needs of the State through the Championing of Student Success"

E. Discussion: Academic Program Planning in the Context of the UW System Strategic Plan

Education Committee
March 30, 2023

Item C.2.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF ARTS AND BACHELOR OF SCIENCE IN CHICANA/O AND LATINA/O STUDIES, UNIVERSITY OF WISCONSIN-MADISON

REQUESTED ACTION

Adoption of Resolution C.2., authorizing the implementation of the Bachelor of Arts and Bachelor of Science in Chicana/o and Latina/o Studies at the University of Wisconsin-Madison.

Resolution C.2. That, upon the recommendation of the Chancellor of the University of Wisconsin-Madison and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Arts and Bachelor of Science in Chicana/o and Latina/o Studies at the University of Wisconsin-Madison.

SUMMARY

The University of Wisconsin (UW)-Madison proposes to offer a Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Chicana/o and Latina/o Studies. The major will be comprised of 30 credits and will offer interdisciplinary analysis of Mexican- and Latin American origin people, cultures, and collectivities within the United States, providing students with broad knowledge and the intellectual tools to understand the unity and diversity of those populations. Implementation of the proposed program will further the university's mission by strengthening social and cultural understanding and will embody the ideals of a pluralistic, multiracial, open, and democratic society. The program will reinforce and complement existing undergraduate offerings, most importantly an undergraduate certificate in Chicana/o and Latina/o Studies, which enrolls more than 150 students each year. Graduates will be equipped to include and engage with diverse perspectives as they pursue careers across a range of fields, such as education, social services, communications, publishing, business, journalism, agriculture, engineering, the arts, construction, and the health professions. As Chicanas/os and Latinas/os are the second largest and fastest growing minoritized population in Wisconsin, familiarity with their histories and cultures will be in demand at the university and in the workplace. Many courses in the program incorporate service and community-based learning, advancing the Wisconsin Idea.

Building on the existing successful Certificate program in Chicana/o and Latina/o Studies, the major will also help to recruit and retain students historically underserved by higher education. Standard tuition rates will apply.

Presenter

- Dr. John Karl Scholz, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised April 29, 2022), available at https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related Policies

- Regent Policy Document 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System

- UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting

ATTACHMENTS

A) Request for Authorization to Implement
B) Cost and Revenue Projections Worksheet
C) Cost and Revenue Projections Narrative
D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF ARTS AND BACHELOR OF SCIENCE IN CHICANA/O AND LATINA/O STUDIES AT UNIVERSITY OF WISCONSIN-MADISON PREPARED BY UW-MADISON

ABSTRACT

The University of Wisconsin (UW)-Madison proposes to offer a Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Chicana/o and Latina/o Studies (CLS). The major will be comprised of 30 credits and will offer interdisciplinary analysis of Mexican- and Latin American-origin people, cultures, and collectivities within the U.S., providing students with broad knowledge and the intellectual tools to understand the unity and diversity of those populations. Implementation of the proposed program will further the university's mission by strengthening social and cultural understanding and will embody the ideals of a pluralistic, multiracial, open, and democratic society. The program will reinforce and complement existing undergraduate offerings, most importantly an undergraduate certificate in CLS, which enrolls more than 150 students each year. Graduates will be equipped to include and engage with diverse perspectives as they pursue careers across a range of fields, such as education, social services, communications, publishing, business, journalism, agriculture, engineering, the arts, construction, and the health professions. As Chicana/os and Latina/os are the second largest and fastest growing minoritized population in Wisconsin, familiarity with their histories and cultures will be in demand at the university and in the workplace. Many courses in the program incorporate service and community-based learning, advancing the Wisconsin Idea. Building on the existing successful Certificate program in CLS, the major will also help to recruit and retain students historically underserved by higher education. Standard tuition rates will apply.

PROGRAM IDENTIFICATION

University Name
University of Wisconsin-Madison

Title of Proposed Academic Degree Program
Chicana/o and Latina/o Studies

Degree Designation(s)
Bachelor of Arts/Bachelor of Science

Mode of Delivery
Single university, Face-to-face delivery

Department or Functional Equivalent
Chicana/o and Latina/o Studies Program (CLSP)

College, School, or Functional Equivalent
College of Letters & Science

Proposed Date of Implementation
September 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the B.A./B.S. in CLS over the next five years. All anticipated enrollments are classified as continuing student headcount because student enrollments in the major will draw from currently enrolled UW-Madison undergraduates. By the end of Year 5, as many as 48 students will have enrolled in the program, as many as 22 students will have graduated, and the program will have achieved a steady rate of 5-10 graduates each year. For planning purposes, enrollment projections assume that most students will formally enter the program in their second year; that there may be built-up demand for the program in the first year; and that interest will grow as the program becomes established. Student persistence is anticipated to align with UW-Madison's 95% retention rate. Finally, this is a conservative estimate to support planning. Enrollments may be higher.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	0	0	0	0	0
Continuing Students	10	15	22	22	31
Total Enrollment	10	15	22	22	31
Graduating Students	0	0	9	5	8

Tuition Structure

For students enrolled in the B.A./B.S. in CLS, standard tuition and fee rates will apply. For the current academic year (2022-23), residential tuition and segregated fees total $5,398.20 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, $4,636.68 ($449.85 per credit) is attributable to tuition and $761.52 (or $63.46 per credit) is attributable to segregated fees. Nonresident tuition and segregated fees total $19,713.72 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, $18,952.20 ($1,579.35 per credit) is attributable to tuition and $761.52 (or $63.46 per credit) is attributable to segregated fees.

DESCRIPTION OF PROGRAM

Overview of the Program

The proposed B.A./B.S. in CLS is comprised of 120 credits, of which 30 credits are attributable to major requirements. Students can meet the 30-credit requirement with courses already developed and offered by the department as part of the CLS program. All UW-Madison undergraduates must complete 27-30 credits of university-wide General Education Requirements. In addition, students must complete the College of Letters & Science (L&S) B.A. or B.S. degree requirements. Many CLS courses may be used to meet both General Education and degree requirements. All undergraduates must successfully complete a minimum of 120 credits to earn a degree.

The interdisciplinary nature of CLS lends itself to complement many other majors across the university. After completing one of the introductory courses in the major, students select one elementary-level course and eight courses at the intermediate and advanced levels. Within this curriculum, the program will offer upper-division seminars suited to student interests, from research to community-based learning or service. The major curriculum will enable students to engage with the history, experience, arts, cultural production, and social lives of communities of Latin American descent in the U.S., developing their capacities for civic and community engagement as well as research, writing, and analytical skills.

A graduate of the program will better understand the largest minoritized ethnic group in the U.S. and will therefore be equipped to work with and serve that population. Graduates also will be able to communicate with members of the public about issues facing the Chicana/o and Latina/o population, participate in making practical policy recommendations related to those issues, and create further knowledge and/or art and culture with and about that population. A B.A./B.S. in CLS can either be the foundation of a graduate education or prepare students to join the workforce after graduation. Examples of potential occupations include entry to or preparation for careers in social work, public administration, nursing, medicine, law enforcement, education, policy analysis, counseling psychology, business, international trade, sales and marketing, service and advocacy, and library science.

Student Learning Outcomes and Program Objectives

The B.A./B.S. in CLS will enable students to develop reading, writing, critical thinking skills, and ethical awareness through engagement with the history, art, experience, cultural production, and social lives of communities of Latin American descent in the U.S. By the end of the program, students will be able to:

a. Identify and analyze core concepts, important social and political issues, and key artistic and cultural expressions related to Chicana/o and Latina/o life in the U.S.

b. Discuss the histories of Chicanas/os and Latina/os in the U.S. and their implications for contemporary problems of racialization, social stratification, colonialism, and oppression.
c. Describe the commonalities and differences among Chicanas/os and Latinas/os along the lines of class, gender, race, sexuality, citizenship, and national origin, and evaluate Latinidad as a pan-ethnic category in the U.S.
d. Analyze relations between Chicanas/os and Latinas/os in the U.S. and their countries of heritage from a transnational and transborder perspective.
e. Apply ideas from Chicana/o and Latina/o Studies to concrete problems through service-learning and community-based research, in a spirit of dialogue and reciprocal exchange informed by ethical and social justice principles.

Program Requirements and Curriculum

Enrollments to the major will be drawn from students already admitted to and enrolled at UW-Madison. There are no additional admission requirements or prerequisites for students to enroll in the major. The B.A./B.S. in CLS curriculum is interdisciplinary. Major requirements include 30 credits of CLS coursework and will cover a range of topics at all the levels required in the proposed major, as well as courses offered by other departments that are already part of the curriculum for the CLS Certificate. The major requires CHICLA 201 Introduction to CLS Studies. A second introductory-level elective in a specific subfield that allows students to develop foundational knowledge in that subfield is also required. In addition, breadth requirements in three broad thematic areas are required, and these areas are: Cultures and Histories (nine credits focused on arts and humanities courses); Individuals, Peoples, Societies (nine credits focused on social science courses); and Serving Chicanx and Latinx Communities (six credits focused on applied social science fields such as social work and education).

Students earning the B.A./B.S. in CLS will complete a minimum of 120 total credits by combining the major course requirements with degree requirements for the College of Letters & Science B.A. or B.S. degree and with the university-wide undergraduate General Education Requirements. Table 2 illustrates the program curriculum for the proposed program. Note that some general education requirements can be completed with courses in the program.

Table 2: B.A. / B.S. in Chicana/o and Latina/o Studies Curriculum

UNIVERSITY GENERAL EDUCATION REQUIREMENTS (GER)	**22-30 credits**
Humanities/Literature/Arts, 6 cr., Natural Science, 4-6 cr., Social Studies, 3 cr.; Communication Part A & Part B, 3-6 cr.; Ethnic Studies, 3 cr.; Quantitative Reasoning Part A & Part B, 3-6 cr.	
L&S B.A. / B.S. BREADTH AND DEGREE REQUIREMENTS	**60-68 credits**
MATHEMATICS: Met either by GER QRA and QRB (BA) or by two additional 3+ cr. courses of intermediate/advanced level MATH, COMP SCI, or STAT courses (BS).	
WORLD LANGUAGE: Met by completion of the 4th unit of a foreign language OR by completion of the 3rd unit of a foreign language and the 2nd unit of an additional foreign language (for BA); OR by completion of the 3rd unit of a foreign language (BS).	
ACADEMIC MAJOR COURSE REQUIREMENTS	
Introductory Course (200-level)	**Min. 3 credits**
CHICLA 201 Introduction to Chicana/o and Latina/o Studies)	3 credits
Introductory Elective (100-200-level)	**Min. 3 credits**
CHICLA/AFROAMER/AMER IND/ASIAN AM/FOLKLORE 102 Introduction to Comparative US Ethnic and American Indian Studies	3 credits
CHICLA/HISTORY 153 Latina/Latino/Latinx History	3-4 credits
CHICLA 210 Chicana/o and Latina/o Cultural Studies	3 credits
CHICLA 230 Topics in Chicana/o and Latina/o Studies	3-6 credits
CHICLA/POLI SCI 231 Politics in Multi-Cultural Societies	3-4 credits
CHICLA/HISTORY 245 Chicana and Latina History	3 credits
CHICLA/HISTORY/LACIS/POLI SCI 268 The US and Latin America from the Colonial Era to the Present: A Critical Survey	3 credits
CURRIC 240 Critical Aspects of Teaching, Schooling, and Education	3 credits
COUN PSY 225 Intersectionalities, Self-Awareness, and Social Actions for Social Change	3 credits
COUN PSY 230 Race and the Developing Child	3 credits
Cultures and Histories (300-600-level)	**Min. 9 credits**
CHICLA 301 Chicana/o and Latina/o History	3 credits
CHICLA 328 Arts and Humanities/Cultures and Histories Topics	
CHICLA/COM ARTS 347 Race, Ethnicity, and Media	3 credits
CHICLA/HISTORY/LACIS/POLI SCI 355 Labor in the Americas: US and Mexico in Comparative and Historical Perspective	3 credits
CHICLA/SPANISH 364 Survey of Latino and Latina Popular Culture	3 credits
CHICLA/ENGL 368 Chicana/o and Latina/o Literatures	3 credits
CHICLA/COM ARTS 419 Latino/as and Media	3 credits
CHICLA/HISTORY 435 Colony, Nation, and Minority: The Puerto Ricans' World	3 credits
CHICLA/ENGLISH 460 Black and Latinx in Literature and Visual Culture	3 credits
CHICLA/SPANISH 467 US Latino Literature	3 credits
CHICLA/SPANISH 469 Topics in Latinx Culture	3 credits
CHICLA/SPANISH 478 Border and Race Studies in Latin America	3 credits
CHICLA 520 Latinx Digital Publics	3 credits
CHICLA 699 Directed Study	1-3 credits

Individuals, Peoples, Societies (300-600-level)	**Min. 9 credits**
CHICLA/POLI SCI 302 Mexican-American Politics	3 credits
CHICLA/POLI SCI 304 US-Mexico Borderlands	3 credits
CHICLA 315 Racial Formation and Whiteness	3 credits
CHICLA 330 Social Science/Individuals, Peoples. Societies Topics in Chicana/o Studies	3-4 credits
CHICLA 332 Latinas: Self Identity and Social Change	3 credits
CHICLA/HISTORY/POLI SCI 422 Latino History and Politics	3 credits
CHICLA/LEGAL ST/SOC 440 Ethnicity, Race, and Justice	3 credits
CHICLA/LEGAL ST/SOC 443 Immigration, Crime, and Enforcement	3 credits
CHICLA/SOC 470 Sociodemographic Analysis of Mexican Migration	3 credits
CHICLA/LAND ARC 475 Latino Urbanism: Design and Engagement in the American City	3 credits
CHICLA 501 Chican@ & Latin@ Social Movements	3 credits
CHICLA 510 Integrative Seminar in Chicana/o Studies	3 credits
CHICLA 530 Advanced Topics in Chicana/o and Latina/o Studies	3 credits
CHICLA 699 Directed Study	1-3 credits
POLI SCI 304 The Political Economy of Race in the United States	3 credits
Serving Chicanx and Latinx Communities (300-600-level)	**Min. 6 credits**
CHICLA/CURRIC 306 Latinx Literacies	3 credits
CHICLA/CURRIC 321 Chicano/Latino Educational Justice CHICLA 329 Education and Service/ Serving Chicanx and Latinx Communities Topics	3 credits
CHICLA/COUN PSY 331 Immigrant Health and Wellbeing	3 credits
CHICLA/COUN PSY 525 Dimensions of Latina/o Mental Health Services	3 credits
CURRIC 670 Theories of Bilingualism and Biliteracy	3 credits
CURRIC 676 Bilingualism and Biliteracy in Schools	3 credits
HDFS 474 Racial Ethnic Families in the U.S.	3 credits
CHICLA 699 Directed Study	1-3 credits
ELECTIVE CREDITS (to reach 120 credits)	**0-8 credits**
RESIDENCE & QUALITY OF WORK IN THE MAJOR: Minimum 2.000 GPA in all CHICLA and major courses Minimum 2.000 GPA computed on at least 15 Upper-Level major courses, completed in Residence. Minimum 15 credits in CHICLA courses taken in Residence and at UW-Madison.	
Total Credits	**Min. 120 credits**

Assessment of Outcomes and Objectives

The CLS Program's Curriculum Committee (CC) will perform assessment of outcomes. Annually, the director of the CC will provide assessment updates, keep track of the assessment timeline, and send email reminders to faculty teaching key courses to collect or input relevant student work for the assessment exercises to be carried out that academic year. The director of the CC, in coordination with staff, will compile all student learning assessment data and distribute it to members of the CC who, in turn, will draft rubrics, review student work, compile results, and write and present the assessment report with recommendations to the entire Program Committee for discussion. After reviewing

the assessment summary and comments from the meeting of the Program Committee, the Program's Executive Committee will decide which (if any) items are actionable and provide a report of those plans, along with the initial assessment summary, to the provost's office.

Annually, the CC will assess two of the five learning outcomes using both direct and indirect assessment measures, such as evaluation of papers, identifying courses, creating rubrics and student surveys. The CC will implement all changes and adjustments suggested by these assessment exercises, if any, starting in the fall semester following the program's implementation and continuing thereafter.

Diversity

The proposed program will expand on a foundation of excellence in teaching and services already offered by the CLS program, in line with the university's Diversity Framework. By providing students with a better understanding of the complex lives of the Latinx population and the unique contribution the group makes and has made to this country, the program's courses promote engagement with the university's shared values of diversity and inclusion.[1] Twenty-three of the program's forty courses meet the Ethnic Studies Requirement, and budgeted CLS faculty members Michael Light and Theresa Delgadillo are making important contributions to this requirement by serving on the Ethnic Studies Subcommittee of the University General Education Committee. In the last five years, the program's yearly service to the requirement has grown from 665 credits per year in 2018, to 1,093 in 2022, with a high of 1,542 in 2020.

The major would diversify the curriculum by providing students with a better understanding of the complex lives of Latinx populations and the contributions they have made to the U.S. Students would relate the experiences of these populations to contemporary, historical, cultural, and political issues ranging from immigration, citizenship, law and justice, health care, education, disability, gender identification, arts, and sexuality. In addition to enriching academic offerings, the availability of the major on campus is likely to help the university recruit and retain a diverse student body.[2] B.A./B.S. in CLS co-curricular programming and outreach efforts are also important in this regard. For example, the program offers weekly lunch gatherings for students to build community and share news about job opportunities, professional services, financial aid counseling, and organizational support available on campus. It also organizes workshops for students interested in pursuing graduate training and career options, as well as group study sessions during the semester. These activities contribute to student success, help the university recruit and retain students from communities historically underserved by higher education.

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[1] UW-Madison Diversity Framework, Goal 1. https://diversity.wisc.edu/reports-policies/#diversity-framework

[2] UW-Madison Diversity Framework, Goals 4 and 5. https://diversity.wisc.edu/reports-policies/#diversity-framework

The major will also help the university recruit, hire, and retain faculty interested in our field. The major exists at most of the university's peer institutions, and the presence on campus of a growing CLS Program has been an important factor in several recent successful faculty hires.

Collaborative Nature of the Program

This program will not be offered as a consortial or collaborative program in the UW System.

Projected Time to Degree

The CLS major is designed to be completed in four academic years by full-time undergraduate students. CLS courses will be offered on a regular basis, with priority given to B.A./B.S. in CLS majors for enrollment in 400-level and 500-level courses. The CLS major will have a sample four-year plan, as is required of all College of Letters and Science majors. Students who pursue the degree part-time, who need additional time, or who wish to pursue an accelerated time-to-degree will work with the CLS advisor to outline a plan that accounts for individual need and timely progress toward completion of degree.

Program Review

The CC, in consultation with the CLS Program's director, will conduct an annual assessment of program learning outcomes. The committee will also collect data on an annual basis about the new major. Like all new programs at UW-Madison, the new major will undergo formal review five years after its creation, in the 2027-28 academic year. Upon completion of that review, the program will be eligible to be reviewed on the usual ten-year program review cycle, consistent with UW Madison Policy and Procedures for program review.[3]

Accreditation

UW-Madison is accredited by the Higher Learning Commission (HLC). The B.A./B.S. in CLS is not subject to additional approval or accreditations. The program will be reported to HLC as a new program after Board approval.

[3] University of Wisconsind-Madison, Academic Planning & Institutional Research, "Academic Program Review" https://apir.wisc.edu/academic-planning/program-review/

JUSTIFICATION

Rationale and Relation to Mission

The UW-Madison mission states that the university should "help students develop an understanding and appreciation for the complex cultural and physical worlds in which they live." The B.A./B.S. in CLS would meet this goal by fostering critical awareness and understanding of issues facing communities of Latin American descent in the U.S.[4] The university also aspires to "attract and serve students from diverse social, economic, and ethnic backgrounds" and "be sensitive and responsive to those…which have been underserved by higher education." The current undergraduate Certificate in CLS provides valuable academic support to students from targeted minorities, and an undergraduate degree program would enhance this work.

Furthermore, the statement specifies that the university should "achieve leadership in each discipline, strengthen interdisciplinary studies, and pioneer new fields of learning."[5] The proposed B.A./B.S. in CLS supports this goal, aligning the campus with peer institutions that already offer such degrees. B.A./B.S. in CLS focus on interdisciplinary undergraduate teaching brings together faculty from a variety of departments who see the program as a "second home." This intellectual exchange in CLS is bearing fruit. In the past year alone, interdisciplinary teams connected with the program have enjoyed notable success in attracting UW-Madison funds and outside grants for projects related to the Chicana/o and Latina/o presence in the U.S. These projects often involve undergraduate research opportunities, and assignments related to them are part of many CLS classes. The program is strengthened by interdisciplinary studies on campus. The projects, which involve collaborations with museums, labor organizations, state offices such as the Department of Public Instruction and Department of Health Services, and educators, also contribute to the university's goal of serving "society through coordinated statewide outreach programs that meet continuing educational needs."[6] B.A./B.S. in CLS faculty, both in their role as researchers and as undergraduate teachers, do interdisciplinary work that exemplifies the Wisconsin Idea. The BA/BS in CLS would enhance these efforts.

University Program Array

CLS is the only one in this discipline at UW-Madison, where it has a long and respected history of offering standalone and cross-listed courses, and a highly successful interdisciplinary certificate program. UW-Madison also offers a major in Latin American, Caribbean and Iberian Studies; however, because the B.A./B.S. in CLS major concentrates on Chicana/o and Latina/o populations in the U.S. and their transborder and transnational dimensions, the proposed program complements this major rather than duplicating it.

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[4] University of Wisconsin-Madison Mission Statement (https://www.wisc.edu/about/mission/), paragraph 2

[5] University of Wisconsin-Madison Mission Statement (https://www.wisc.edu/about/mission/), goal 3

[6] University of Wisconsin-Madison Mission Statement (https://www.wisc.edu/about/mission/), goal 4

Other Programs in the University of Wisconsin System

There is not another CLS major offered in the UW System. UW-Milwaukee also offers a B.S. in Latin American, Caribbean, and U.S. Latinx Studies and UW-Eau Claire offers a B.A./B.S. in Latin American and Latinx Studies. Each is similar to the UW-Madison Latin American, Caribbean, and Iberian Studies program. These programs are more broadly focused, incorporating transborder and transnational elements, whereas the proposed program focuses on communities of Latin American descent in the U.S.

Need as Suggested by Current Student Demand

The CLS program currently offers a successful undergraduate certificate in CLS. Recent growth in demand for the certificate suggests that demand for the major would be strong. Table 3 shows enrollment and awards in the certificate have more than tripled since 2014.

Table 3: Enrollments in the CLS Certificate, 2014-21

YEAR (spring)	2014	2015	2016	2017	2018	2019	2020	2021
ENROLLMENTS	49	45	60	82	102	100	122	169
AWARDS	11	20	10	13	42	31	37	53

In advising conversations, students frequently express their interest in a major, and these statements are supported by the results of a survey conducted by the program. The survey was distributed through networks that included current CLS certificate students and others interested in the program. More than 200 students responded to the survey, with a program-wide response rate of 56% and 37% of responses from students not enrolled in the certificate. Of the completed surveys, 90% of students indicated that they would major in CLS. These responses provide strong evidence of serious student interest in a CLS major among current certificate students, as well as students who are interested in CLS but not pursuing a certificate.

Students responding to the survey noted that they use the CLS certificate to enrich pre-professional programs of study aimed at education, human services, health professions, law, engineering, and business. A major in CLS will provide such students with the opportunity to engage with the field in greater depth. The increasing student demand for courses in Chicana/o and Latina/o studies and the recent growth of the certificate program suggest that such a major is viable and needed on campus.

Need as Suggested by Market Demand

Chicana/os and Latina/os are the second largest and the fastest growing minoritized population in Wisconsin, and are the largest minoritized population in the U.S. According to the U.S. Census Bureau, communities of Latin American descent constituted 3.6% of the state's population in 2000. By 2020 that figure had risen to an estimated 7.6%. UW-Madison

serves students originating from large cities in the upper Midwest that have large and diverse Chicana/o and Latina/o populations. Businesses, social service organizations, and government agencies that serve this community value candidates with the knowledge and cultural competence needed to work effectively with these growing communities. For example, for the occupational category of Social and Community Service Managers, the U.S. Department of Labor Bureau of Labor Statistics occupational projections indicated that more than 20,400 new positions in the occupation of Social and Community Service Managers are expected to be added between 2021 and 2031, indicating 12% growth in this area. Individuals holding a B.A./B.S. in CLS will be well poised to manage such programs. The proposed major will produce graduates to meet agency demand for employees who can equitably serve a diverse U.S. population.

Furthermore, universities offering a similar major report that graduates holding a credential in this field are in high demand in a variety of sectors. Graduates have secured position in research, education, policy and advocacy, and business and industry. Common careers and pathways for graduates include K-12 teachers, policy advisor, ombudsman, grant writer, corporate human resources, marketing, and social and community services.[7] Finally, graduates will be well prepared to pursue additional and advanced training to pursue occupations in law, education, or graduate degrees in the humanities and social sciences.

[7] BA in Chicano Studies: The (Un)Surprisingly Practical Degree for Job Prospects, UTEP Connect, January 2020.

University of Wisconsin - Madison
Cost and Revenue Projections For B.A./B.S. in Chicana/o and Latina/o Studies

	Items	Projections				
		2023	2024	2025	2026	2027
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**					
	Enrollment (Continuing Student) Headcount	10	15	22	22	31
	Enrollment (New Student) FTE	0	0	0	0	0
	Enrollment (Continuing Student) FTE	10	15	22	22	31
II	**Total New Credit Hours**	100	150	220	220	310
	Existing Credit Hours	0	0	0	0	0
III	**FTE of New Faculty/Instructional Staff**	0	0	0	0	0
	FTE of Current Fac/IAS	2.75	2.75	2.75	2.75	2.75
	FTE of New Admin Staff	0	0	0	0	0
	FTE Current Admin Staff	2	2	2	2	2
IV	**Revenues**					
	From Tuition	$38,639	$57,959	$85,006	$85,006	$119,781
	From Fees	$0	$0	$0	$0	$0
	Program Revenue (Grants)	$0	$0	$0	$0	$0
	Program Revenue - Other	$0	$0	$0	$0	$0
	GPR (re)allocation	$487,870	$478,781	$462,168	$472,812	$448,893
	Total New Revenue	$526,509	$536,739	$547,174	$557,818	$568,674
V	**Expenses**					
	Salaries plus Fringes					
	Faculty/Instructional Staff	$350,813	$357,829	$364,986	$372,285	$379,731
	Other Staff	$160,696	$163,910	$167,188	$170,532	$173,943
	Other Expenses					
	Facilities					
	Equipment					
	Instructional Supplies & Expenses	$15,000	$15,000	$15,000	$15,000	$15,000
	Other (please list)					
	Total Expenses	$526,509	$536,739	$547,174	$557,817	$568,674
VI	**Net Revenue**	$0	$0	$0	$0	$0

Submit budget narrative in MS Word Format

Provost's Signature:	**Date:** 2/3/2023
Chief Business Officer's Signature:	**Date:** 2/2/2023

COST AND REVENUE PROJECTIONS NARRATIVE
BACHELOR OF ARTS AND BACHELOR OF SCIENCE IN CHICANA/O AND LATINA/O STUDIES
UNIVERSITY OF WISCONSIN-MADISON

Introduction

The proposed Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Chicana/o and Latina/o Studies (CLS) will be a 30-credit major that can be combined with the College of Letters & Science B.A. or B.S. degree requirements, which stipulate a minimum of 120 total credits. All the courses are currently offered at UW-Madison. This major is fully supported by the College of Letters & Science (L&S) and the UW-Madison. By 2027-28, the fifth year of the program, enrollment in the BA/BS is expected to be approximately 31 full-time students. The costs and revenues of the proposed program will be managed as part of the UW-Madison instructional/tuition pool (Fund 101). All tuition revenues collected from students enrolled in this program will be pooled at the institution-level. Tuition revenues will be allocated from the fund to the College of Letters & Science to support the faculty and staff for instructional, advising, and administration within the regular budget allocation process. As the program grows, L&S will allocate funding from these revenues as appropriate to support this program through the customary budgeting processes.

Section I – Enrollment

All anticipated enrollments are classified as continuing student headcount and FTE, because student enrollments in the major will draw from currently enrolled UW-Madison undergraduates; the program is not expected to specifically draw new and additional students. Undergraduates who are enrolled at UW-Madison will elect to pursue the proposed major in CLS as a choice among UW-Madison's more than 100 undergraduate programs. For planning purposes, assumptions include the expectation that all students will begin taking courses as sophomores and that the 30 credits of the CLS major are taken in the second (sophomore), third, and fourth year. Projections assume a 95% persistence rate from year to year, corresponding to the overall persistence rate at UW-Madison; and a graduation rate of 88%, similar to the graduation rate from sophomore status. Plans are for the number of students newly enrolled in the program to be 10 in Year 1, 5 in Year 2, 8 in Year 3, 10 in Year 4, and 15 in Year 5. The total number of continuing students will be higher after Year 1 because of students continuing from prior years are transitioning into the new major. With this projection, 48 students will have entered the major and 22 students will have graduated over the first 5 years. This is a conservative estimate to support planning, and enrollments may be higher.

Section II – Credit Hours

The major curriculum consists of core and elective credits offered by the Chicana/o and Latina/o Studies Program, and collaborating departments, totaling 30 credits out of the total 120 credits needed for the degree/major. For the purposes of the credit hour estimate, students are assumed to begin taking courses for the major in their second year and complete the required credits in the third and fourth years. Projections make a simplifying assumption that students will enroll in and distribute these credits evenly over their 2nd, 3rd, and 4th years of study. Therefore, the total number of credits attributed specifically to the major, annually, is estimated to be the number of enrolled students multiplied by 10 credits per year. By the fifth year of the program, as enrollment grows, the total number of credits attributed specifically to the major is projected at 310 student credit hours.

All courses for this major are currently offered at UW-Madison because they are already included in a range of related programs, including the undergraduate certificate in CLS, which currently has 184 students enrolled. The CLS Program expects to be able to accommodate students in the major with current staffing levels.

Section III – Faculty and Staff Appointments

There is currently capacity to begin the program because the College of Letters & Science increased the number of faculty in the CLS Program beginning in 2018. Current staff include advisor Rachelle Eilers, Administrator Peter Haney, and the following faculty: Theresa Delgadillo (25%), Armando Ibarra (50%), Michael Light (50%), Rubén Medina (25%), Almita Miranda (50%), Marla Ramírez Tahuado (25%), Aurora Santiago-Ortiz (50%), and Revel Sims (50%). The program thus employs a total of 3.25 FTE and another 2 FTE in non-teaching roles.

Section IV – Program Revenues

The major in CLS will draw on the existing pool of UW-Madison undergraduates. No new additional funding specifically for this program will be provided to the CLS Program by the College of Letters & Science; the B.A./B.S. will be supported by reallocation and enrollment growth in existing programs. As program enrollment and student credit hours grow, additional funding will become available through the funding formula followed by UW-Madison's academic year budget model.

<u>Tuition Revenues</u>

The revenue projections include a simple estimate of revenues based on estimated student major credit hours taken annually at $386.39 per credit tuition (excluding segregated fees). The per-credit tuition estimate was based on the 2022-23 Wisconsin resident undergraduate rate. The estimate does not account for tuition collected for credits taken above the credit plateau, credits taken outside of the major requirements, or tuition based on non-resident tuition rates.

Assuming the same tuition rate over the first five years, estimated tuition revenue for credits in the major would be approximately $36,639 in Year 1, and $119,781 by Year 5. Again, no additional costs are associated with offering this major. No new faculty or staff will be recruited at this time. All courses needed to fulfill the requirements of the major already exist.

General Program Revenue (GPR)

The GPR reallocation line illustrates that by Year 5, the program will not be a net contributor to General Program Revenue. These figures do not include credit hours generated by non-majors who enroll in Chicana/o & Latina/o Studies classes. The new BA/BS Program would offer UW-Madison undergraduates a new major option without additional expenses beyond the current budget of the Chicana/o and Latina/o Studies Program.

Section V – Program Expenses

The program budget assumes that expenditures for faculty and staff will remain at the current levels. The budget includes funds for one undergraduate program advisor, one FTE administrative manager, and one 40% Project Assistant. Promotion and marketing will be incorporated into the general promotional materials (i.e., website, brochures) prepared for all academic programs. Because the program uses existing courses, there are no course development costs.

Salary and Fringe Expenses

The program budget includes no new FTE faculty or staff. Estimated salary, based on current rates, is $362,168 for faculty and instructional staff and $160,696 for other staff. Fringe rates are set at the FY2023 UW-Madison rates of 36.6% for faculty and academic staff, and 21.7% for Graduate Assistants. Salary estimates anticipate a 2% increase each fiscal year.

Other Expenses

Expenditures for supplies, expenses, and undergraduate student help are projected to remain at the program's current level.

Section VI – Net Revenue

The major in Chicana/o and Latina/o Studies will not generate net revenue for the university. Actual tuition revenues collected from students enrolled in this program will be pooled at the institution-level. Student instruction and support will be funded from the 101 instructional/tuition pool. Students enrolled in the major will partake of a range of courses and student services across campus, beyond the 30 credits of instruction and direct advising allocated in this budget.

WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

Date: 3 February 2023
To: Johannes Britz, Interim Senior Vice President for Academic and Student Affairs, UW System
via email: apfa@uwsa.edu
From: John Karl Scholz, Provost and Vice Chancellor for Academic Affairs
Subject: Authorization Proposal: BA/BS in Chicana/o and Latina/o Studies

In keeping with UW System and Board of Regents policy, I am sending you a proposal for a new BS/BS in Chicana/o and Latina/o Studies at the University of Wisconsin–Madison.

The program is designed to meet UW–Madison's definition and standards of quality and make a meaningful contribution to the university's select mission, overall academic plan, and academic degree program array. Students will be required to meet all the requirements and standards for a bachelor's degree at UW–Madison.

Per UW–Madison policy, this program proposal has been endorsed by the faculty of the offering department (i.e., the Chicana/o and Latina/o Studies Program), the dean and academic planning council of the program's academic home (i.e., the College of Letters & Science), and the University Academic Planning Council. It moved through the UW System Notice of Intent process in September 2021. I send the proposal forward with broad university-wide support, governance approval, and my endorsement.

The program faculty have established a robust plan for curriculum delivery, student support, assessment of student learning, and program review. The College of Letters & Science is committed to the necessary financial and human resources required to continue the program. The proposal provides details on these commitments.

Contingent upon Board of Regents approval, the faculty plan to implement the new program in fall 2023 with first enrollments in the fall of 2023. We are requesting that this proposal be scheduled for consideration at the March 2023 Board of Regents meeting. Please contact Karen Mittelstadt (mittelstadt@wisc.edu) with any questions about these materials.

Attachments: Authorization Narrative, Cost and Revenue Projections, Cost and Revenue Projections Narrative

Copies:
Jennifer L. Mnookin, Chancellor, UW–Madison
Jennifer Noyes, Interim Chief of Staff, Office of the Chancellor
Rob Cramer, Vice Chancellor for Finance and Administration
David Murphy, Associate Vice Chancellor for Finance and Administration
Allison La Tarte, Interim Associate Vice Provost, Academic Planning and Institutional Research
Karen Mittelstadt, Institutional Academic Planner, Academic Planning and Institutional Research
Eric Wilcots, Dean, College of Letters & Science
Elaine Klein, Associate Dean, College of Letters & Science
Tracy Davidson, Interim Associate Vice President of Academic Programs & Faculty Advancement, UW System
Diane Treis Rusk, Director of Academic Programs and Student Learning Assessment, UW System

Office of the Provost and Vice Chancellor for Academic Affairs
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Education Committee
March 30, 2023

Item C.3.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) MASTER OF SCIENCE IN BUSINESS: DATA, INSIGHTS, AND ANALYTICS, UNIVERSITY OF WISCONSIN-MADISON

REQUESTED ACTION

Adoption of Resolution C.3., authorizing the implementation of the Master of Science in Business: Data, Insights, and Analytics at the University of Wisconsin-Madison.

Resolution C.3. That, upon the recommendation of the Chancellor of the University of Wisconsin-Madison and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Master of Science in Business: Data, Insights, and Analytics at the University of Wisconsin-Madison.

SUMMARY

The University of Wisconsin-Madison proposes to establish a Master of Science (M.S.) in Business: Data, Insights, and Analytics. The development of the program responds to the increase of data availability and the desire of companies to use it as a competitive resource. This need has produced a dramatic increase in the number of career opportunities in business analytics. Establishing the program will provide students with a strong methodological foundation and the ability to utilize tools to generate insights from data. Graduates will apply analytical tools to uncover insights and provide actionable recommendations in any business setting. The program contributes to the UW-Madison mission by offering high-quality instruction on a global scale. It aligns with the UW-Madison strategic framework by advancing excellence in teaching and educational achievement, as well as expanding access and leveraging new modes of delivery to engaged learners throughout their lives. The 30-credit program will be delivered in a part-time, online asynchronous format that students can complete in two years. Graduates will be prepared for careers as business analysts across any business function such as marketing, finance, and operations. U.S. Bureau of Labor Statistics (BLS) data indicated that there were 950,600 management analyst positions in 2021 and projected 10-year occupational growth of 11%.[1]

[1] https://www.bls.gov/ooh/business-and-financial/management-analysts.htm

This program will be developed and delivered in collaboration with an online program manager, edX. It will serve as the pilot program for the partnership with edX in the for-credit space. Service-based tuition pricing will apply.

Presenter

- Dr. John Karl Scholz, Provost and Vice Chancellor for Academic Affairs

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (Revised April 29, 2022), available at https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related Policies

- Regent Policy Document 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System

- UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting

ATTACHMENTS

A) Request for Authorization to Implement
B) Cost and Revenue Projections Worksheet
C) Cost and Revenue Projections Narrative
D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A MASTER OF SCIENCE IN BUSINESS: DATA, INSIGHTS, AND ANALYTICS AT UNIVERSITY OF WISCONSIN-MADISON PREPARED BY UW-MADISON

ABSTRACT

The University of Wisconsin-Madison proposes to establish a Master of Science (M.S.) in Business: Data, Insights, and Analytics. The development of the program responds to the increase of data availability and the desire of companies to use it as a competitive resource. This need has produced a dramatic increase in the number of career opportunities in business analytics. Establishing the program will provide students with a strong methodological foundation and the ability to utilize tools to generate insights from data. Graduates will apply analytical tools to uncover insights and provide actionable recommendations in any business setting. The program contributes to the UW-Madison mission by offering high-quality instruction on a global scale. It aligns with the UW-Madison strategic framework by advancing excellence in teaching and educational achievement, as well as expanding access and leveraging new modes of delivery to engaged learners throughout their lives. The 30-credit program will be delivered in a part-time, online asynchronous format that students can complete in two years. Graduates will be prepared for careers as business analysts across any business function such as marketing, finance, and operations. U.S. Bureau of Labor Statistics (BLS) data indicated that there were 950,600 management analyst positions in 2021 and projected 10-year occupational growth of 11 percent.[1] This program will be developed and delivered in collaboration with an online program manager, edX. It will serve as the pilot program for the partnership with edX in the for-credit space. Service-based tuition pricing will apply.

PROGRAM IDENTIFICATION

University Name
University of Wisconsin-Madison

Title of Proposed Academic Degree Program
Business: Data, Insights, and Analytics

[1] https://www.bls.gov/ooh/business-and-financial/management-analysts.htm

Degree Designation(s)
Master of Science

Mode of Delivery
Single university, fully distance delivery

Department or Functional Equivalent
School of Business

College, School, or Functional Equivalent
School of Business

Proposed Date of Implementation
September 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. The projections are conservative and were developed considering data provided by edX and based on performance of similar programs offered on the edX platform. By the end of Year 5, it is expected 775 students will have enrolled in the program and 203 students will have graduated from the program. These projections are based on one entry point in years 1 and 2 and two entry points in year 3 and beyond and assume a cohort model where all students will complete the program in two years. The average student retention rate is projected to be 65 percent year-over-year. This is lower than the average retention rate for UW-Madison graduate programs, but reflects a typical rate for online, adult learners on the edX platform.[2] The enrollment projection for Year 1 has been adjusted to account for a 3-6 month recruiting window, depending on campus approvals. The Year 2 projection accounts for a full recruitment cycle. The Year 3 projection incorporates multiple entry points per year. The Year 4 and 5 projections incorporate expected growth based on the conservative edX assumptions.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	25	75	150	225	300
Continuing Students	N/A	17	49	98	147
Total Enrollment	25	92	199	323	447
Graduating Students	N/A	11	32	64	96

[2] edX 2021 Transparency Report

The program will constantly monitor pedagogical methods and instructor interaction to ensure it is supporting university and federal requirements for regular and substantive interaction, speaking to both program capacity and retention. Should program demand outpace the capacity to scale resources at the same pace, an enrollment cap will be implemented. Monitoring of enrollments relative to available resources will inform any future cap decisions, but as the program is looking beyond a five-year projection toward ten years, it is not expecting enrollments beyond 500 new students per year. Similarly, to support retention efforts, as multiple application intake periods and start terms are added each year, and the increasing enrollments require additional course section offerings each term, the ease of stopping out and rejoining the program will increase for students. By Year 3 and beyond, as entry points and course offerings have stabilized at high levels, students will have more flexibility and choice as they progress through the program, enhancing student retention efforts.

Tuition Structure

The tuition structure for the proposed program will be based on service-based pricing principles for distance education as articulated in SYS 130: Programming for the Non-Traditional Market in the UW System. For students enrolled in the M.S. in Business: Data, Insights, and Analytics program, the tuition rate will be $800 per credit for a total of $24,000 for the entire two-year program. Students are expected to carry a part-time load for the duration of the program.

This pricing structure was determined after extensive market research and is aimed at attracting the desired audience of global, online, price-sensitive adult learners. This degree is well-positioned to offer exceptional value at a reasonable price that affords financial accessibility with a lens towards providing equitable access to the degree program. At the same time, students enrolled in a scaled online degree program such as this do not want or need extended services, support, or social and work experiences. The result and the streamlined services and support model allow for an affordable price point to be offered to a higher volume of enrolled students, especially relative to a face-to-face, residential degree program.

DESCRIPTION OF PROGRAM

Overview of the Program

The M.S. in Business: Data, Insights, and Analytics degree will be a part-time cohort-based program that includes accelerated courses, typically in an eight-week format. The curriculum will consist of fifteen 2-credit classes that are offered in an online, asynchronous, instructor-paced mode. Students will complete the degree in two years taking 16 credits in the first academic year and 14 credits in the second academic year. It is expected that students with undergraduate studies in business will be interested in the proposed program to expand their knowledge in business analytics and access

corresponding career opportunities. Students majoring in statistics, economics, computer science, and many other quantitative non-business fields will be interested in this program to link their undergraduate studies to business in order to expand their career possibilities.

Student Learning Outcomes and Program Objectives

The M.S. in Business: Data, Insights, and Analytics program combines a broad set of analytical and quantitative skills relevant to business with background in managing and carrying out analytics projects in the business context. This program will allow students to harness the power of data to address complex questions and contribute strategic insights in any industry. Upon completion of the program, students will be equipped to fulfill a variety of roles in business analytics, including but not limited to that of analyst, data engineer, data scientist, or analytics project manager. Specifically, students will demonstrate competence in the following learning outcomes:

- Apply business analytic tools and methods to solve business problems.
- Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques.
- Manage analytics projects, communicate professionally, and influence data-based changes within an organization.
- Use software tools to go from data collection to solution implementation.

Program Requirements and Curriculum

The proposed program is designed for students who have completed bachelor's degrees in most undergraduate majors, and particularly for students with quantitative strengths and interests. Most applicants will be graduates with business majors who wish to acquire more analytical skills, as well as non-business majors who want to blend analytical skills with business applications. The following will be required for admission to the M.S. in Business: Data, Insights, and Analytics program: 1) response to essay question(s); 2) resume; 3) completion of an undergraduate degree and submission of transcripts; application and application fee.

Submission of TOEFL or IELTS test scores will be required for applicants whose native language is not English. The TOEFL is waived for students who have completed a four-year undergraduate degree and/or master's degree (minimum of eight semesters total) with instruction in English or who will complete such a degree prior to matriculation into the M.S. in Business: Data, Insights, and Analytics program. All undergraduate and master's degree transcripts will be evaluated. Schools outside the U.S. may be verified by World Education Services (WES) at the individual class level. Applicants to the M.S. in Business: Data, Insights, and Analytics program may choose to submit a GMAT or GRE score and/or a letter of recommendation but both of these are optional.

Table 2 illustrates the program curriculum for the proposed program. The program consists of 15 required 2-credit classes for a total of 30 credits.

Table 2: M.S. in Business: Data, Insights, and Analytics Program Curriculum

Course	Credits
GEN BUS 881 – Business Statistics Using Python	2 credits
GEN BUS 882 - SQL Fundamentals	2 credits
GEN BUS 883 - Data Visualization & Cloud Technologies	2 credits
GEN BUS 884 - Applied Analytics - Case Studies	2 credits
GEN BUS 885 - Python Fundamentals	2 credits
GEN BUS 886 - Foundations of Predictive Modeling for Business Analytics	2 credits
GEN BUS 740 - Experiments and Causal Methods for Business Insights	2 credits
GEN BUS 888 - Applied Machine Learning for Business Analytics	2 credits
GEN BUS 730 - Predictive Modeling and Optimization for Business Analytics	2 credits
GEN BUS 746 - Advanced SQL and Data Warehousing	2 credits
GEN BUS 891 - Text Mining for Business Analytics	2 credits
GEN BUS 745 - Robotic Process Automation	2 credits
GEN BUS 893 - Analytics Consulting Project Management	2 credits
GEN BUS 894 - Pitfalls, Ethics, Communication, & Leadership in Business Analytics	2 credits
GEN BUS 895 - Masters Capstone in Business Analytics	2 credits
Total Credits	**30 Credits**

Assessment of Outcomes and Objectives

The M.S. in Business: Data, Insights, and Analytics program will use the standard UW-Madison review guidelines, namely a first review as a new academic program at year five, and then a program review at least once every ten years. The learning outcomes for the program and the courses will use a variety of direct assessment tools and approaches, including traditional assignments, cases, and projects. These examples of student work will be drawn from required coursework in the program. Each class instructor will manage its assessments. The program-level learning outcomes will be assessed on a rotating basis to ensure all outcomes are assessed at least once every three years. Assessment findings will be reported both to the university and the Wisconsin School of Business (WSB) Master's Curriculum Committee (MCC). The WSB MCC will review assessments to make improvements to the curriculum, specific classes, and the program overall. The MCC is composed of faculty from many WSB departments. These faculty members are responsible for overseeing the curriculum planning and program overall.

Assessment measures that are not meeting their targets will be evaluated with the appropriate faculty member(s). Possible outcomes of the evaluation would be a modification of the course curriculum or a change in the assessment mechanism. Given the breadth of assessment mechanisms considered, this review will also serve as an evaluation of the program's overall quality and success, providing an opportunity to adjust and improve the program to continue meeting student and market needs. An abbreviated report will be provided to the Office of the Provost, in accordance with UW-Madison institutional guidelines on student learning assessment.

In addition, the WSB will perform internal evaluations of the program one, three, five, and 10 years after launch. In each of these reviews, the program will be evaluated according to the program revenues flowing to the WSB, the direct and indirect costs of the program, and the educational outcomes. The result of each review stage is to either proceed with the program as is, modify the program, put the program on hold, or abandon the program. The fifth year and tenth year reviews evaluate not only current revenue and costs elements, but also future financial implications given school and industry enrollment trends. These reviews will include evaluations by the WSB MCC and the school's Academic Planning Council (APC).

The program will have a director and a faculty lead who will oversee day-to-day management. The program will be governed by a program APC and the school MCC. The M.S. in Business: Data, Insights, and Analytics will be overseen by the Associate Dean of M.B.A. and Masters programs. The Associate Dean serves as the chair of the MCC, is appointed by the dean, and reports to the dean. Participating faculty and staff on the MCC are identified by the Associate Dean, in collaboration with the department chairs, to identify faculty that have experience teaching in the program and are available for service work. The MCC discusses curricular and programmatic issues and makes motions to the committee for a vote of all faculty members.

Diversity

Diversity and inclusion are core values for the WSB. In alignment with the school's commitment to diversity and inclusion, program and course design is considered through a framework of inclusive teaching strategies which look at the students, instructor teaching methods, and course content. The program also provides DEI training as part of the orientation activities.

The M.S. in Business: Data, Insights, and Analytics is offered on a global scale, and it is expected that students from varying cultural, socio-economic, and other backgrounds will pursue this degree. The diversity of the class will be drawn on to enrich learning, e.g., via discussion boards. Students will collaborate and provide feedback to each other, requiring students to engage with others who may be of a different gender, ethnicity, or background.

The analytics curriculum also addresses the issues of bias and equity. The required class GEN BUS 894 Pitfalls, Ethics, Communication, and Leadership in Business Analytics actively engages with ethical dimensions of business analytics. Some key concepts covered in the class include bias and fairness, such as how bias can arise from measurement, data provenance, or predictive algorithms. How algorithms can reinforce bias is demonstrated within the coursework. Furthermore, algorithmic fairness is discussed, particularly different notions of fairness and the corresponding incompatibility. In the master's Capstone class (i.e., GEN BUS 995), these ideas are reinforced, and concepts and tools related to algorithmic bias and fairness are practiced.

As an online, part-time degree option, this program will allow candidates global access to quality education from wherever they are located. Barriers are reduced because everyone will have access to pursue this degree through the online learning channels, which will make it more convenient for all. Students will be recruited through online methods such as online recruitment fairs, webinars, podcasts, and consultation appointments. Existing channels will be leveraged to promote the degree at events nationally, as well as locally. Additional plans are to leverage purchasing lists from GMAC and ETS where candidates self-identify programs of interest to better target candidates who have an interest in data, insights, and analytics. The WSB will host events in the community and with corporations to promote the value of the degree, leveraging current corporate outreach efforts to share this new part-time opportunity to develop skills and knowledge in this area. With the WSB marketing and strategic communications team, the program will promote the advantages of online learning and a part-time program and will showcase the affordability of a premier education for career enhancement and development. As an additional note, conscious efforts will be made to increase the number of students that are underrepresented minorities. Working with the marketing team in the WSB, the program will explore ways to reach this applicant community. Marketing funds have been allocated within the budget and the marketing efforts are intended to be inclusive of and targeted towards both underrepresented minorities as well as women. Current leads will also be leveraged to cross-promote the degree and explore different search services in order to purchase new leads. Intentional connections are also being made across the campus in different student organizations, which can help WSB connect with this community.

To support student retention and success, each instructor is assigned an instructional designer as part of course development. The instructional designer will ensure that the course meets the high standards of accessibility and will utilize key practices of Universal Design for Learning to make a welcoming and inclusive course for all. An inclusive learning environment is established when all students are supported in adapting to the structure, schedule, expectations, and technologies used in the course. Supporting students requires thorough communication about how their course is set up, what they have to do, how the course is run administratively, and what resources and services are available to help them succeed. It also includes providing students with clear opportunities to get feedback on their work and guidance on the appropriate way to interact with others in the course. The instructor and instructional designer will collaborate to make certain that these elements are in place. Each course design begins with an appropriate orientation module (known as Module 0) that establishes a sense of belonging through student and instructor introductions, rules for discussion forums and other course engagement, and strategies/resources to be successful as a learner. It is important to appropriately scaffold this work as students develop the deeper and more meaningful relationships that they need as they mature through the curriculum and into the more project-based capstone courses of the program. The instructional designers use standardized icons and work with the instructor to revise text into plain language that is accessible to all learners.

Support is made available to all students who are looking for strategies on how to persist and be successful in the coursework. This is particularly relevant given the online, asynchronous nature of the program. The metrics available within the online platform allow the opportunity to check each student's progress and engagement. Metrics will be closely monitored in order to quickly intervene if there are signs of a student struggling with the coursework. Time is budgeted to allow the instructors to assist struggling students. Beyond these course-based intervention activities, the program will monitor overall student success and retention in the degree program. If a student does need to stop out of the program, advisors will maintain contact with them and provide encouragement and resources to support reengagement with the program as quickly as feasible. As the program grows and both available start terms and course offerings grow, the flexibility a student has to rejoin the program will also increase. For example, by Year 3, it will be possible for a student to stop out in one term and reenroll the next.

The M.S. in Business: Data, Insights, and Analytics program will also follow the WSB's diversity initiatives in recruiting and hiring faculty and staff. Examples of these initiatives include expanding advertising and outreach of open positions to increase diversity of the candidate pool, including cultural competency as a desired skill in all position vacancy listings and including cultural competency questions in each phase of the interview process. The program will follow the WSB's hiring process in order to ensure fair practices and equity in recruiting and hiring of faculty and staff. Those practices include but are not limited to the development of a comprehensive guide to employment searches called Searching for Excellence & Diversity. The 100+ page document details best practices for running an effective and efficient search committee, how to recruit an excellent and diverse pool of applicants, how to recognize and eliminate unconscious bias during the candidate evaluation process, conducting a fair and thorough review, and ensuring a fair interview process. These steps are supported by staff members in HR, who attend the initial search kick-off meeting, and are proactively involved in the continuation of the process including conducting a review of search criteria prior to opening the pool of candidates. Additionally, they review interview questions prior to the start of interviews and conduct a salary review prior to an offer being extended.

Once hired, all new members of the learning community are introduced to a strategic focus on diversity and inclusion during onboarding and receive professional training in progressive levels of cultural competence. Faculty and staff actively participate in workshops that encourage conversations about inclusion and enable them to overcome their own unconscious biases. WSB's commitment to creating a positive, inclusive learning environment is further reinforced by insightful seminars for faculty members, focusing on strategies to create more inclusive classroom experiences. Staff diversity will be supplemented through guest speakers and the involvement of other industry leaders in order to mirror diversity within the industry.

The M.S. in Business: Data, Insights, and Analytics degree program is in alignment with the Chancellor's 2020-2025 Strategic Framework[3]. As a globally offered online degree that retains the institution's high standards for academic rigor, the program is: (1) promoting entrepreneurship, innovation, and economic development both in Wisconsin and beyond; and (2) sharing the benefits of a world-class university throughout Wisconsin and beyond our borders. By offering a part-time online asynchronous program, access will be increased for populations who are not currently able to embark on a traditional degree on campus. This could be due to accessibility concerns, access concerns (financial or physical), or lifestyle concerns. It could also be due to work or family obligations preventing them from engaging with a degree bearing synchronous requirements.

All program and WSB initiatives to address and increase diversity described above assist the WSB to meet the Association to Advance Collegiate Schools of Business' commitment to the Diversity and Inclusion guiding principle. As an accredited institution, the institution stands by and supports this guiding principle which states: "Diversity in people and ideas enhances the educational experience and encourages excellence in every business education program. At the same time, diversity is a culturally embedded concept rooted in historical and cultural traditions, legislative and regulatory concepts, ethnicity, gender, socioeconomic conditions, religious practices, and individual and shared experiences. Within this complex environment, the school is expected to demonstrate a commitment to advancing diversity and inclusion issues in the context of the cultural landscape in which it operates. The school fosters awareness, understanding, acceptance, and respect for diverse viewpoints related to current and emerging issues."[4]

Collaborative Nature of the Program

No partnerships or consortial arrangements are planned with other UW universities. This degree will be developed and delivered in collaboration with an online program manager, edX. edX is a global learning platform with approximately 42 million users, more than 110 million enrollments, and more than 3,600 courses offered. UW-Madison has entered into this partnership with edX to increase access to high-quality education and enhance online teaching opportunities. In partnering with edX, the university receives the benefit of edX's extensive global marketing services to reach global audiences more effectively, the provision of data containing active leads WSB recruiters can nurture, as well as twenty-four-hour technology and support resources/services for staff and students engaged on the platform. In the partnership with edX, UW-Madison will be responsible for:

- Integrations between edX and UW-Madison systems
- Application process and admissions

[3] https://strategicframework.wisc.edu/living-the-wisconsin-idea/

[4] AACSB. 2020 Guiding Principles and Standards for Business Accreditation. See https://www.aacsb.edu/-/media/documents/accreditation/2020-aacsb-business-accreditation-standards-jul-1-2022.pdf?rev=b40ee40b26a14d4185c504d00bade58f&hash=9B649E9B8413DFD660C6C2AFAAD10429

- Financial aid and billing
- Curriculum development and instructional design
- Course instruction, including grading
- Graduation clearance and awarding of degree
- Student services, such as advising and career support

Projected Time to Degree

The degree is expected to be completed by students over two years. It is designed as a part-time program that includes accelerated courses, typically in an eight-week format. The curriculum will consist of 15, two-credit classes that are offered in an online, asynchronous, instructor-paced mode.

Program Review

As for all new UW-Madison graduate programs, the program will have a check-in review by the Graduate Faculty Executive Committee three years after implementation. After this time, the program will be automatically rolled into the review cycle for the WSB, which aligns with the school's Association to Advance Collegiate Schools of Business (AACSB International) accreditation reviews. GFEC requires submission of supplementary review materials in addition to the full AACSB report.

Accreditation

No specialized accreditation or HLC approval is required. The AACSB International is the accrediting body and will review this program for accreditation at their next visit in 2026-2027. HLC approval is not required but the institution is required to notify the HLC of the partnership with edX if the degree is approved by the Board of Regents.

JUSTIFICATION

Rationale and Relation to Mission

The M.S. in Business: Data, Insights, and Analytics program will build upon the WSB's' standing as a preeminent business school focused on lifelong learning and the delivery of skills that address the evolving needs of the global digital economy. This program will serve as the pilot program for the campus partnership with edX in the for-credit space and is proposed to be offered on the edX platform to expand the reach and awareness of WSB' highly rated business degrees to a broader, global audience. The institution's traditional marketing mechanisms have limitations in terms of reaching certain global markets and global marketing endeavors are extremely expensive. The edX platform has a proven marketing system, reaching audiences previously unavailable to UW-Madison. With the edX partnership, the program will have access to their large global community. Based on market research conducted by edX, there is a significant content gap, employer need, and student demand for an online degree focusing on business analytics in the

Americas, Europe, Asia, and the Pacific regions, where edX has access to millions of potential students. The M.S. in Business: Data, Insights, and Analytics is positioned to meet this need.

By offering a high-quality program in an area of high expected impact, the M.S. in Business: Data, Insights, and Analytics serves the UW Mission.[5] In particular, the global program footprint will allow a very broad audience to benefit from this unique program and help foster cross-cultural understanding. The M.S. in Business: Data, Insights, and Analytics degree program is also in alignment with the Chancellor's 2020-2025 Strategic Framework.[6] As a globally offered online degree that retains the institution's high standards for academic rigor, the WSB is: (1) promoting entrepreneurship, innovation, and economic development both in Wisconsin and beyond and (2) sharing the benefits of a world-class university throughout Wisconsin and beyond our borders. The program aligns with and contributes to the UW-Madison strategic framework with regards to objective three in "Excellence in Teaching and Educational Achievement" related to expanding access and leveraging new modes of delivery to engaged learners throughout their lives. This is a fully online asynchronous program that targets part-time students on a global scale. This program also contributes to objective three related to expanding programming in areas of high student demand. edX market research identified WSB's program as having a particularly high chance of impact and success. Importantly, the program aligns with the first objective in rubric "High-Performing Organization" related to growing revenues.

Launching this in-demand program on the edX platform opens the school and university to a new revenue and enrollment stream, predicted to enroll 300 new degree seeking students in Year 5 with $3.5 million dollars in revenue. This innovative degree option is in alignment with campus mission and goals and supports the WSB's goal of reaching top national/international ratings for the school's online business degrees.

University Program Array

The WSB does not currently have a cohesive and fully online graduate degree program. Whether it is from a position of remaining competitive with graduate programming, expanding the school's reach to a more global student population, or providing a more flexible and accessible learning opportunity for working professionals, the school must continue developing its infrastructure, student support resources, and instructor capabilities to provide high-quality, fully online education. This online M.S. in Business: Data, Insights, and Analytics program contributes to that capacity. This new program will provide directions, if not a blueprint, for future growth of the school's online portfolio, especially for graduate-level specializations.

[5] https://www.wisc.edu/about/mission/

[6] https://strategicframework.wisc.edu/living-the-wisconsin-idea/

From a curriculum perspective, the most similar program on the UW-Madison campus is the face-to-face M.S. in Business: Analytics, a specialized residential program of great desirability approved by the UW Board of Regents in June 2020 with enrollment beginning summer 2021. The core learning outcomes of the M.S. in Business: Analytics and the proposed M.S. in Business: Data, Insights, and Analytics are similar, but there is substantial distinction between the programs in terms of delivery mode, length of program, and target audience. The proposed program is offered online asynchronously on the edX platform and will be designed for a part-time, global audience as opposed to a full-time residential audience. In anticipation of the market demand identified by edX, the curricular offerings will be well-defined and streamlined in order to offer the program at a larger scale. Given the partnership with edX and the technical integrations that are needed for a seamless flow and exchange of data between UW and edX, the path is to pursue a new degree rather than a new subplan/named option; the necessary technical integrations must take place at the plan level.

The delivery mode and audience are also key distinctions to other in-person UW-Madison data science programs, including the M.S. in Data Science jointly offered by the Departments of Statistics and Computer Science; the M.S. in Data Engineering offered by the Information School; the M.S. in Statistics (Statistics and Data Science subplan/option); the M.S. in Economics (Graduate Foundations subplan/option); and the M.S. in Industrial Engineering (Systems Engineering and Analytics subplan/option). In addition, these degrees require a deeper technical background. For instance: 1) M.S. in Data Science program applicants need to show they have completed particular quantitative college-level coursework and have experience using R for statistical analysis and data management; 2) Data Engineering degree program applicants must have a bachelor's degree in computer science or a related field; and 3) M.S.-Industrial Engineering program applicants require a background in engineering, statistics, and programming. The M.S. in Business: Data, Insights, and Analytics does not require this level of technical background or quantitative skills prior to entering the program.

The College of Engineering's Interdisciplinary Professional Programs offers an online master's degree in Engineering Data Analytics (MEDA). While the curriculum is similar in that both programs cover machine learning, visualization tools, and predictive analytics, the contexts used to teach the content are different. The MEDA degree focuses on data analytics in terms of engineering optimization in various applications. The M.S. in Business: Data, Insights, and Analytics degree will focus on data analytics in terms of business applications and industries.

Other programs on campus that have some similarity with the proposed degree are the M.S. in Information, and the M.S. in Educational Psychology subplan/option in Learning Analytics. The M.S. in Information degree, particularly the Data Analytics track within the degree, focuses on data mining and data management, topics that are more peripheral in the proposed degree, which will focus more on analysis, automation, and decision making.

The M.S. in Educational Psychology and its Learning Analytics subplan/option focuses on applications of analytics in an educational context, whereas the proposed degree focuses on applications of analytics in a business context. Both the M.S. in Information and the M.S. in Educational Psychology subplan/option in Learning Analytics have a wide range of electives, whereas the proposed new degree has no electives.

Other Programs in the University of Wisconsin System

The proposed Classification of Instructional Programs (CIP) code for the M.S. in Business: Data, Insights, and Analytics is 30.7102—Business Analytics. This CIP varies from the face-to-face M.S. in Business Analytics, as this is a newer CIP code that was released after approval of the M.S. in Business Analytics.

Within the UW system, there is a UW collaborative M.S. in Data Science offered by six UW campuses and UW Extended Campus. However, the focus of the program is on data science, with a heavy emphasis on computer-science methods and more specialized tools. In contrast, the M.S. in Business: Data, Insights, and Analytics degree is more applications focused.

UW-Whitewater offers an Online M.S. degree in Data Analytics. This is the only master's-level program within the UW System that carries the same CIP code as the proposed M.S. in Business: Data, Insights, and Analytics. The curricula between this degree and the proposed M.S. in Business: Data, Insights, and Analytics degree differ significantly. Of the credits in the UW-Whitewater degree, 40% are electives focusing on business functions/areas, whereas there are no elective choices in the proposed program. In contrast, the proposed M.S. in Business: Data, Insights, and Analytics goes more deeply into analytics tools applied in a business context. It is anticipated that the proposed program, in large part due to the enhanced marketing efforts and global reach afforded by the edX platform, will reach a different population than the UW-Whitewater program.

Need as Suggested by Current Student Demand

There is proven market demand for a business analytics degree, as gleaned from the success of the university's existing residential M.S. in Business: Analytics. This program, which began in 2021, enrolled 87 students in Year 1 and 110 in Year 2. In addition, edX has provided the School of Business with enrollment projections based on their expanded global access to this type of educational opportunity. Their low/medium/high enrollment projections at the proposed price point amount to 300+/750+/1600+ cumulative enrollments over the next five years for this new degree program. One of the key reasons edX anticipates a successful program is the combination of a strong brand, a high-demand topic, and a disruptive price, coupled with the high quality of a WSB program.

It is expected there may be minor impact on applications to the institution's residential programs, particularly the residential M.S. in Business: Analytics program, as well as other related programs on the UW-Madison campus. Some students may prefer the delivery format (online, asynchronous, part-time) and may be attracted to the lower price point. However, it is expected that the number of programs offered by other universities in this domain that are of a similar format will increase, so if UW-Madison is not serving these students' differentiated needs and preferences, they will likely choose competitor institutions and programs. Moreover, the demand for the WSB residential programs has been very strong, so the program currently is unable to accommodate a number of strong applicants, especially international ones. Hence, it is expected that the impact on the number of admitted students in WSB residential programs will be minor, especially given the substantial differentiation in the curricula and the services offered to the students.

The M.S. in Business: Data, Insights, and Analytics degree enrollment is supported by interest generated through a non-credit three course program sampler of the degree content, called a MicroMaster. The MicroMaster is a credential awarded by edX. Students are allowed to enroll in these courses on a non-credit basis to see if their knowledge and interest is sufficient to support applying for enrollment in the degree program. As of October 2022, the UW-Madison MicroMaster courses have a total enrollment of 410 students across all three courses. Of these 410 enrollments, 13 are paid enrollments. Per data provided by edX, the School of Business expects a conversion rate of 3-10% of paid MicroMaster enrollments to convert to degree-seeking students. The three-course program includes the following courses: Business Statistics Using Python, SQL Fundamentals, and Data Visualization and Cloud Technologies.

Need as Suggested by Market Demand

The worldwide demand for data analysts has sparked a surge in business analytics programs across the country. These programs report robust applicant pools and impressive placement rates for graduates. Market research performed by edX shows a specific and highest need/demand for content in big data, machine learning, business analytics, data warehousing, data science, data visualization, and statistical programming. The proposed degree provides value to students and their current and future employers in all of these key areas of need and demand. The U.S. Bureau of Labor Statistics (BLS) for management analysts lists the May 2021 median pay of $93,000 annually, with 950,600 jobs in 2021, and an 11% growth in job outlook from 2021-31, which is much faster than average.[7] For the state of Wisconsin, employment numbers are 16,930, with an annual mean wage of $99,400.[8] This is consistent with salary reports for this specific degree[9] and peer institution reports indicating high placement rates for students graduating from business analytics programs.

[7] https://www.bls.gov/ooh/business-and-financial/management-analysts.htm
[8] https://www.bls.gov/oes/current/oes131111.htm#st
[9] https://analytics.tepper.cmu.edu/articles/how-masters-business-analytics-can-boost-your-salary/

University of Wisconsin - Madison
Cost and Revenue Projections For MS-Business: Data, Insights, and Analytics

	Items	Projections				
		2023-24	2024-25	2025-26	2026-27	2027-28
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**	25	75	150	225	300
	Enrollment (Continuing Student) Headcount	0	17	49	98	147
	Enrollment (New Student) FTE	12.5	37.5	75	112.5	150
	Enrollment (Continuing Student) FTE	0	8.5	24.5	49	73.5
II	**New Credit Hours**	400	1438	3086	4972	6858
III	**FTE of New Faculty/Instructional Staff**					
	Faculty Director (0.11 FTE, $300,000/yr)	0.11	0.11	0.11	0.11	0.11
	Faculty (1.0 FTE Yr1, 4.11 FTE Yr5, $300,000/yr)	1	2	3	4	4.11
	Teaching Assistants (2.67 FTE Yr1, 23 FTE Yr5)	2.66	6.66	13.32	19.98	22.98
IV	**Revenues**					
	From Tuition (based on $800/credit)	$320,000	$1,150,400	$2,468,800	$3,977,600	$5,486,400
	From MicroMasters Course Offerings	$5,000	$40,000	$80,000	$120,000	$161,000
	Total New Revenue	$325,000	$1,190,400	$2,548,800	$4,097,600	$5,647,400
V	**Expenses**					
	Salaries					
	Faculty Director (0.11 FTE, $300,000/yr)	$ 33,000	$ 33,660	$ 34,333	$ 35,020	$ 35,720
	Program Director (1.0 FTE, $110,000/yr)	$ 110,000	$ 112,200	$ 114,444	$ 116,733	$ 119,068
	Office Manager (1 FTE, $60,000/yr)	$ 60,000	$ 61,200	$ 62,424	$ 63,672	$ 64,946
	Admissions Team (1.0 FTE Yr1, 3.0 FTE Yr3, $66,667/yr)	$ 66,667	$ 136,001	$ 208,081	$ 212,243	$ 216,488
	IT Support (0.25 FTE, $70,000/yr)	$ 17,500	$ 17,850	$ 18,207	$ 18,571	$ 18,943
	Marketing Specialist (0.13 FTE, $70,000/yr)	$ 9,100	$ 9,282	$ 9,468	$ 9,657	$ 9,850
	Faculty (1.0 FTE Yr1, 4.11 FTE Yr5, $300,000/yr)	$ 300,000	$ 612,000	$ 936,360	$ 1,273,450	$ 1,334,639
	Teaching Assistants (2.67 FTE Yr1, 23 FTE Yr5, $23,227/yr)	$ 61,877	$ 157,786	$ 321,883	$ 492,481	$ 577,680
	Fringe Benefits					
	Fringe on Faculty and Staff Salaries - 33.33%	$198,736	$327,365	$461,060	$576,391	$599,824
	Fringe on TA's - 21.7%	$13,427	$34,239	$69,849	$106,868	$125,357
	TOTAL Salaries plus Fringe	$870,307	$1,501,583	$2,236,108	$2,905,085	$3,102,513
	Other Expenses					
	Marketing	$250,000	$187,500	$100,000	$100,000	$100,000
	edX Revenue Share	$112,000	$402,640	$864,080	$1,392,160	$1,920,240
	Total Expenses	$1,232,307	$2,091,723	$3,200,188	$4,397,245	$5,122,753
VI	**Net Revenue - Reinvestment Margin**	-$907,307	-$901,323	-$651,388	-$299,645	$524,647

Submit budget narrative in MS Word Format

Provost's Signature: 	**Date:** 2/3/2023
Chief Business Officer's Signature: 	**Date:** 2/2/2023

COST AND REVENUE PROJECTIONS NARRATIVE
MASTER OF SCIENCE IN
BUSINESS: DATA, INSIGHTS, AND ANALYTICS
UNIVERSITY OF WISCONSIN-MADISON

Introduction

The Wisconsin School of Business (WSB) is proposing a Master of Science (M.S.) in Business: Data, Insights, and Analytics. The program is proposed to fulfill the growing demand from both prospective students and industry-hiring partners for individuals who know how to harness the power of analytical tools to uncover insights and provide actionable recommendations in any business setting. The program is 30 credits and will be delivered in a part-time, online asynchronous format that students can complete in two years. An online tuition rate of $800 per credit is proposed under the UW System Tuition Policy (SYS 805) and UW System Policy for Programming for the Non-traditional Market (SYS 130). This program will be developed and delivered in collaboration with an online program manager, edX, and serves as the pilot program for the campus partnership with edX in the for-credit space.

Section I – Enrollment

The program will be launched as a part-time cohort-based program. Students will complete 16 credits in the first academic year and 14 credits in the second academic year. The program will begin enrolling students in Fall 2023 with a projected enrollment of 25 students in the first year. As a two-year program, Full Time Equivalent (FTE) enrollments will be calculated as 50% of enrolled students. Therefore, the School of Business projects 12.5 FTEs in Year 1. The average student retention rate is projected to be 65% year-over-year. This is lower than the average retention rate for UW-Madison graduate programs, but reflects a typical rate for online, adult learners on the edX platform.[1] By Year 5 of the program, enrollment will grow to a projected 300 new student headcount and a 147 continuing student headcount for a total of 223.5 FTEs. Monitoring of enrollments relative to available resources will inform any future enrollment cap decisions, but as the program is looking beyond a five-year projection toward ten years, it is not expecting enrollments beyond 500 new students per year.

Section II – Credit Hours

The M.S. in Business: Data, Insights, and Analytics requires 30 credits for graduation. The program will be launched as a part-time cohort-based program with 16 credits being completed in the first academic year and 14 credits being completed in the second academic year. The plan is for one intake in the fall in Year 1 and 2 and then growing to two intakes (one in the fall and one in the spring) for Years 3 through 5. The School of Business is estimating that 65% of the students that start the program will complete Year 1 and

[1] edX 2021 Transparency Report

continue to Year 2. Total program credits are forecast to be 400 student credit hours in the first year growing to 6,858 student credit hours in the fifth year. This is a conservative estimate, and credits could be higher if program enrollment is higher.

Section III – Faculty and Staff Appointments

The M.S. in Business: Data, Insights, and Analytics will be led by a faculty director (annual salary $300,000) contributing 11% of the effort (0.11 FTE). The program will have a full-time program director (annual salary $110,000) and an office manager (annual salary $60,000) who will be responsible for curriculum, assessment, and supporting students during the program. Due to the volume of applications and expected enrollments, the program will include three recruitment managers (3.0 FTEs with a total annual salary of $200,000 or $66,667 per FTE). These 3.0 FTEs will be hired over time as the program grows, but it is expected to have all three individuals in place by Year 4 of the program. Due to the integrations required between UW-Madison and edX, the program will also be supported by a User Support Specialist III (annual salary $70,000) contributing 25% of the effort (0.25 FTE). Finally, a 13% marketing specialist (annual salary $70,000) will be brought on to help the program reach the desired enrollment goals.

Instruction will be supported by a combination of Wisconsin School of Business faculty, instructional staff, and teaching assistants. In the first year of the program, several faculty and academic staff will contribute to instruction with the sum of those contributions to be approximately 1.0 FTE at an annual salary of $300,000. That will increase to approximately 2.0 FTEs in Year 2 of the program and is expected to be 4.11 FTEs by Year 5 of the program. In the first year, eight teaching assistants (TAs), with 33.3% time each, will be employed for a total of 2.67 FTEs of TA support. That will increase to 69 TAs at 33.3% time each for a total of 23 FTEs of TA support. The 33.3% TA rate is projected at $23,227.

Section IV – Program Revenues

<u>Tuition Revenues</u>

The program will be supported through tuition revenue, and the proposed online tuition rate of $800 per credit is a disruptive market price strategically selected to drive enrollment. Students will be required to take 30 credits to meet graduation requirements. A 65% retention rate is built into the model. Total tuition is estimated to be $320,000 in the first year of enrollment, growing to more than $5.45 million by Year 5 of the program (based on 6,858 student credit hours).

<u>Grants/Extramural Funding</u>

The Wisconsin School of Business received $750,000 in venture (donor) funding to support the implementation of the M.S. in Business: Data, Insights, and Analytics on the edX platform. These funds were provided by an elite donor cohort whose intention is to provide the School of Business seed funding for revenue/reputation-generating initiatives, such as specifically this edX new program.

These funds will be used to support the start-up costs of the program (e.g., instructional design, supporting technology, and marketing) prior to the enrollment of students in Fall of 2023; therefore, the revenues are not reflected in the cost revenue projections document.

Program Revenue (PR)

The Wisconsin School of Business received $500,000 in campus seed funding from the provost to support the successful program planning and implementation of this pilot program on the edX platform. This funding will be spent before enrollment begins and is designed to immediately bolster capacity within the School of Business to support the program development and launch. This includes accelerating the hiring of program support individuals, project management, scaled learning technology and design, access and accommodate features, programmatic structure, and recruiting.

In addition, the program will receive support from the edX MicroMasters program, which was launched on edX in fall 2022. Students can choose to either audit the MicroMasters courses or become a verified student. UW-Madison will receive $1,075 per verified student in each MicroMasters course. Total revenue is estimated to be $5,000 in Year 1 of the MicroMasters program and grow to $161,000 by Year 5.

Section V – Program Expenses

Salary and Fringe Expenses

Several faculty and staff will support the program as described in Section III. All salaries are assumed to have a 2% inflationary rate applied. A fringe benefit rate of 33.33 percent is applied to all faculty/staff salaries and a fringe benefit rate of 21.7% is applied to teaching assistants. Faculty and staff supporting the program will include:

- One faculty director, 0.11 FTE (annual salary $300,000)
- One full-time program director, 1.0 FTE (annual salary $110,000)
- One office manager, 1.0 FTE (annual salary $60,000)
- Admissions Team Members, 3.0 FTEs (total annual salary $200,000)
- One IT Support Team Member, 0.25 FTE (annual salary $70,000)
- One Marketing Specialist, 0.13 FTE (annual salary $70,000)
- Faculty for Instruction (annual salary $300,000)
    - 1.0 FTE in year one of the program
    - 4.11 FTEs in year five of the program
- Teaching Assistants (0.33 FTE rate of $23,227)
    - 2.67 FTEs in year one of the program
    - 23 FTEs in year five of the program

Other Expenses

- edX revenue share—35% of net tuition and MicroMasters revenue
- Marketing—$62,500 in the start-up year (three months of marketing); $250,000 in year one of enrollment; $187,500 in year two of enrollment, and $100,000 each year thereafter.

Section VI – Net Revenue

The M.S. in Business: Data, Insights, and Analytics program is projected to have net deficits in the first four years of enrollment. These net deficits will total $2.76 million. The School of Business will use a combination of program revenue from other successful 131 programs and discretionary donor funds to close the deficit in these initial years. The program will start to generate net revenue in the fifth year, totaling approximately $525,000. Once the program breaks even and the start-up costs are recouped, the Wisconsin School of Business will invest 60% of the investment margin in new faculty lines, 20% of the investment margin to support departmental salaries and program support, and the remaining 20% to support student scholarships. Long-term student enrollment capacity in the program, and thus potential revenues beyond five years, are unknown at this point. The program and university will carefully monitor demand, enrollment, and resources to gauge ongoing growth. But it is reasonable to expect up to 500 new students enrolling each year by Year 10, creating a very substantial revenue stream for ongoing reinvestment in the M.S. in Business: Data, Insights, and Analytics program, as well as other School of Business 131 programs and initiatives.

WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

Date: 3 February 2023
To: Johannes Britz, Interim Senior Vice President for Academic and Student Affairs, UW System
via email: apfa@uwsa.edu
From: John Karl Scholz, Provost and Vice Chancellor for Academic Affairs
Subject: Authorization Proposal: MS-Business: Data, Insights, and Analytics

In keeping with UW System and Board of Regents policy, I am sending you a proposal for a new MS-Business: Data, Insights, and Analytics at the University of Wisconsin–Madison.

The program is designed to meet UW–Madison's definition and standards of quality and make a meaningful contribution to the university's select mission, overall academic plan, and academic degree program array. Students will be required to meet all the requirements and standards for a master's degree at UW–Madison.

Per UW–Madison policy, this program proposal has been endorsed by the faculty of the offering department the dean and academic planning council of the program's academic home (i.e., the School of Business), and the University Academic Planning Council. It moved through the UW System Notice of Intent process in December 2022. I send the proposal forward with broad university-wide support, governance approval, and my endorsement.

The program faculty have established a robust plan for curriculum delivery, student support, assessment of student learning, and program review. The School of Business is committed to the necessary financial and human resources required to continue the program. The proposal provides details of these commitments.

Contingent upon Board of Regents approval, the faculty plan to implement the new program in fall 2023 with first enrollments in the fall of 2023. We are requesting that this proposal be scheduled for consideration at the March 2023 Board of Regents meeting. Please contact Karen Mittelstadt (mittelstadt@wisc.edu) with any questions about these materials.

Attachments: Authorization Narrative, Cost and Revenue Projections, Cost and Revenue Projections Narrative

Copies:
Jennifer L. Mnookin, Chancellor, UW–Madison
Jennifer Noyes, Interim Chief of Staff, Office of the Chancellor
Rob Cramer, Vice Chancellor for Finance and Administration
David Murphy, Associate Vice Chancellor for Finance and Administration
Allison La Tarte, Interim Associate Vice Provost, Academic Planning and Institutional Research
Karen Mittelstadt, Institutional Academic Planner, Academic Planning and Institutional Research
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Education Committee
March 30, 2023

Item C.4.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING, UW OSHKOSH

REQUESTED ACTION

Adoption of Resolution C.4., authorizing the implementation of the Bachelor of Science in Biomedical Engineering program at the University of Wisconsin Oshkosh.

Resolution C.4. That, upon the recommendation of the Chancellor of UW Oshkosh and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Biomedical Engineering program at the University of Wisconsin Oshkosh.

SUMMARY

The University of Wisconsin Oshkosh (UW Oshkosh) proposes to establish a B.S. in Biomedical Engineering (B.S.-BME). The program will complement the university's existing engineering technology offerings and aid in research, economic development, entrepreneurship, and sustainability in Wisconsin, consistent with the mission of UW Oshkosh to provide "a high-quality liberal education to all of its students in order to prepare them to become successful leaders in an increasingly diverse and global society." The proposed program at UW Oshkosh will meet emerging student demands in biomedical engineering throughout the state, especially in northeast Wisconsin. The program requirements consist of 129 credits, of which 44 credits are required to meet the general education and degree requirements for UW Oshkosh College of Letters and Science. The remaining 85 credits are specific to the B.S.-BME program. The proposed curriculum will prepare graduates to enter a wide range of careers in biomedical technology and healthcare, including medical implants and prosthetics, devices and equipment, imaging and signal processing, and organ and tissue engineering. The Association Board for Engineering and Technology (ABET) accreditation will be sought to ensure program quality. Participants in the program will be charged the standard tuition rate plus an additional $700 per semester to offset higher engineering faculty salaries and laboratory costs. The development of this program responds to a growing demand for biomedical engineers. The Bureau of Labor Statistics predicts that demand for biomedical engineers will grow more than 5% from 2019 to 2029.

Presenter

- John Koker, Provost and Vice Chancellor for Academic Affairs, UW Oshkosh

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (revised March 31, 2020, available at https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related Policies

- Regent Policy Document 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System

- UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting

ATTACHMENTS

A) Request for Authorization to Implement
B) Cost and Revenue Projections Worksheet
C) Cost and Revenue Projections Narrative
D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING AT UNIVERSITY OF WISCONSIN OSHKOSH PREPARED BY UW OSHKOSH

ABSTRACT

The University of Wisconsin Oshkosh (UW Oshkosh) proposes to establish a B.S. in Biomedical Engineering (B.S.-BME). The program will complement the university's existing engineering technology offerings and aid in research, economic development, entrepreneurship, and sustainability in Wisconsin, consistent with the mission of UW Oshkosh to provide "a high-quality liberal education to all of its students in order to prepare them to become successful leaders in an increasingly diverse and global society." The proposed program at UW Oshkosh will meet emerging student demands in biomedical engineering throughout the state, especially in northeast Wisconsin. The program requirements consist of 129 credits, of which 44 credits are required to meet the general education and degree requirements for UW Oshkosh College of Letters and Science. The remaining 85 credits are specific to the B.S.-BME program. The proposed curriculum will prepare graduates to enter a wide range of careers in biomedical technology and healthcare, including medical implants and prosthetics, devices and equipment, imaging and signal processing, and organ and tissue engineering. The Association Board for Engineering and Technology (ABET) accreditation will be sought to ensure program quality. Participants in the program will be charged the standard tuition rate plus an additional $700 per semester to offset higher engineering faculty salaries and laboratory costs. The development of this program responds to a growing demand for biomedical engineers. The Bureau of Labor Statistics predicts that demand for biomedical engineers will grow more than 5% from 2019 to 2029.[1]

PROGRAM IDENTIFICATION

University Name
University of Wisconsin Oshkosh

Title of Proposed Academic Degree Program
Biomedical Engineering

Degree Designation(s)
Bachelor of Science

[1] https://www.bls.gov/oes/current/oes172031.htm

Mode of Delivery
The engineering curriculum will be offered in a face-to-face delivery format.

Department or Functional Equivalent
Department of Engineering Technology

College, School, or Functional Equivalent
College of Letters and Science

Proposed Date of Implementation
September 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the first five years. The two continuing students in Year 1 are projected to be students currently enrolled in other programs who will switch to the B.S.-BME once it becomes available.

By the end of Year 5, it is expected that 127 students will have enrolled in the program and 29 students will have graduated from the program. The average student retention rate is projected to be 90%, based on existing data for the UW Oshkosh Engineering Technology majors. It should be noted that the program plan assumes that students would begin in calculus as their first math class. Students may begin their collegiate education in other math classes, but a student beginning at a significantly lower math level would face a longer time to degree completion.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	8	25	25	32	35
Continuing Students	2	9	30	50	66
Total Enrollment	10	34	55	82	101
Graduating Students				9	20

Tuition Structure

For the current academic year, standard residential tuition and segregated fees total $3,897.78 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, $3,211.08 is attributable to tuition and $686.70 is attributable to segregated fees. In addition, it is proposed that all students enrolled in the program will pay $700 per semester in additional tuition to offset the higher faculty salaries found in engineering as well as costs associated with specialized laboratory equipment, software, and program resources that must be regularly maintained and updated. Nonresident tuition and

segregated fees total $7,684.26 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, $6,997.56 is attributable to tuition and $686.70 is attributable to segregated fees. Additional tuition of $700 per semester will apply.

Students will be responsible for procuring textbooks for all classes, either by purchase or rental. UW Oshkosh estimates the average cost of textbooks at $500 per semester for full-time students.

DESCRIPTION OF PROGRAM

Overview of the Program

This degree consists of a total of 129 credits. This credit total accommodates the math and science courses required by ABET in addition to the university's general education and Bachelor of Science requirements. Students will take a core liberal arts curriculum that consists of nine credits of communication (writing and speaking), 12 credits across the social science disciplines, 12 credits across the culture and humanities disciplines, three credits of mathematics, and eight credits of general science. Together, these courses meet the requirements for UW Oshkosh's University Studies (general education) Program. In addition, students in the B.S.-BME degree program will take an additional 42 credits of math and science courses to build a foundation for the professional engineering coursework.

The engineering major itself totals 43 credits, which includes 18 credits of foundational engineering and technology courses, 10 credits of core BME courses, nine credits of advanced BME electives, and 6 credits of design and internship or capstone project. The breakdown of coursework is specifically designed to give students experience in a broad spectrum of BME disciplines.

Student Learning Outcomes and Program Objectives

Student learning outcomes for the B.S.-BME degree are two-fold. The first set of outcomes is defined by the UW Oshkosh general education requirements and more specifically the degree requirements for the College of Letters and Science. Per the UW Oshkosh University Studies Program, all UW Oshkosh students will gain knowledge of human cultures as well as the physical and natural world "through study in fine and performing arts, humanities, mathematics and science, and social science focused by engagement with big questions, both contemporary and enduring."[2]

The second set of outcomes, specifically for the B.S.-BME major, are defined by ABET's Student Outcomes for engineering program accreditation. The seven outcomes are an ability to:

[2] https://uwosh.edu/usp/about-usp/essential-learning-outcomes/

1. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. Communicate effectively with a range of audiences.
4. Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. Develop and conduct appropriate experimentation, analyze, and interpret data, and use engineering judgment to draw conclusions.
7. Acquire and apply new knowledge as needed, using appropriate learning strategies.

Graduates of this program will be prepared to take the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering (FE) Exam, the first step to becoming a licensed Professional Engineer.

Program Requirements and Curriculum

There are no set program requirements for admission to the degree program that are separate from admission to the University.

Table 2 illustrates the curriculum for the proposed program. The program requirements consist of 129 credits, of which 44 credits are required to meet the general education and degree requirements for UW Oshkosh College of Letters and Science. The remaining 85 credits are specific to the B.S.-BME program. Of those 85 credits, 42 are for additional supporting mathematics and general science courses and the remaining 43 credits are taken within the engineering technology department.

Table 2: Bachelor of Science in Biomedical Engineering Program Curriculum		
General education courses required for graduation:		
	Communication (Writing, Speaking)	9 credits
	Cultural and Humanities (XC, HU, Literature)	12 credits
	Social Sciences (XS, SS, History)	12 credits
	Math (XM) *listed in program pre-requisites	3 credits
	Natural Science (XL) *listed in program pre-requisites	8 credits

Additional Program prerequisites or support courses:		
	Mathematics Math 171/172 – Calculus 1, Calculus 2 Math 301 – Statistics Math 371 – Differential Equations	12 credits
	General Science Physics 191/192 – General Physics I/II Chemistry 105/106 – General Chemistry I/II Biology 105 – Bio Concepts – Unity Biology 211 – Human Anatomy Biology 212 – Human Physiology Biology 323 – Molecular & Cell Biology Kinesiology 340 – Biomechanics	30 credits
Academic degree program or major course requirements:		
	Engineering & Technology EGR 105 – Engineering Fundamentals EGRT 118 – Fluid Control EGRT 130/131 – Basic Electrical Circuits I/II EGRT 284 – Professional Skills EGRT 325 – Signals & Systems	18 credits
	Biomedical Engineering Core EGR 106 – Biomedical Engineering Seminar EGR 304 – Biomedical Materials EGR 308 – Biomedical Devices EGR 326 – Medical Imaging	10 credits
	Biomedical Major Elective (Choose 9 credits from the following:) Kinesiology 170 – Medical Terminology Kinesiology 380 – Running Injuries, Assessment & Intervention Kinesiology 410 – Applied Biomechanical Principles & Techniques Biology 306 – Neurobiology EGR 340 – Medical Instrumentation EGR 343 – Computing for Bioengineering EGR 345 – Introduction to Cell & Tissue Engineering EGR 282 – Engineering Economics EGRT 360 – Project Management	9 credits
	Engineering Design EGR 392 – Biomedical Design Project EGR 400 – Capstone Project (or Internship)	6 credits
Total Credits		129 credits

Assessment of Outcomes and Objectives

Program and degree assessment will follow the requirements of the ABET accreditation process. The Engineering Technology department at UW Oshkosh already has a robust assessment procedure for the Engineering Technology degrees as they relate to ABET, and this assessment will be extended to the new B.S.-BME degree. Assessment instruments will be developed as needed to ensure the following specific ABET-required student outcomes for the program:

1. Applying principles of engineering, biology, human physiology, chemistry, calculus-based physics, mathematics (through differential equations) and statistics;
2. Solving bio/ BME problems, including those associated with the interaction between living and non-living systems;
3. Analyzing, modeling, designing, and realizing bio/ BME devices, systems, components, or processes; and
4. Making measurements on and interpreting data from living systems.

Since ABET is the national accrediting body for engineering programs, their criteria, assessment tools, and guidelines will also be followed for the evaluation and assessment of eight general criteria, including: 1) Students; 2) Program Educational Objectives; 3) Student Outcomes; 4) Continuous Improvement; 5) Curriculum; 6) Faculty; 7) Facilities; and 8) Institutional Support.

The policies, procedures, and instruments used for each criterion in the assessment are in the 66-page ABET Accreditation Policy and Procedure Manual (APPM).[3] ABET accreditation provides assurance that programs meet the quality standards for the engineering profession.

At the curricular level, ABET establishes student outcomes for each engineering discipline, and the department develops the continuous improvement process that assesses student achievement in these areas. Each student outcome is broken into several performance indicators that can be assessed in appropriate courses. Typically, performance indicators are assessed in higher level courses after the skills and desired outcomes have been introduced at the lower level and reinforced at the intermediate level. Instructors use rubrics to evaluate various student products such as written reports, oral presentations, examples of problem solving, capstone projects, etc. The data generated is aggregated from courses across the curriculum and compared to results from prior years and to goals set by the department in its annual assessment review. The review is shared with the advisory board and feedback is solicited.

[3] https://www.abet.org/accreditation/accreditation-criteria/accreditation-policy-and-procedure-manual-appm-2022-2023/

In addition to these processes, the Faculty Senate Assessment Committee reviews academic program assessment plans, and each department reports the findings of its outcomes assessment to the Faculty Senate Assessment Committee triennially. A required element of these reports is a plan for using the results for continual improvement of student learning.

Diversity

Inclusive Excellence is highly valued at UW Oshkosh and within the Engineering Technology department. Faculty have specifically been working on increasing diverse perspectives throughout the engineering and engineering technology curriculum through interdisciplinary course offerings and integrated examples in engineering content courses. The faculty believe that it is necessary that engineers understand the role of engineering in designing and building a just and inclusive world, not simply a mathematically optimized world. The assessments of criteria two and four of the ABET student outcomes assure that the program will be actively engaged in providing an inclusive learning environment.

The curriculum for the B.S.-BME degree has several components which increase inclusivity. First, there are no additional entrance requirements beyond those of UW Oshkosh. Removing additional barriers provides an accessible path to an engineering degree for many students. The first two years of the program are largely foundational and assume students will not begin their studies with backgrounds in chemistry, physics, or advanced mathematics, thus starting all students on an equal footing. In addition, though the 4-year plan assumes students will begin in Calculus 1, students can begin in pre-calculus without extending their degree timeline. The department is also committed to a liberal arts educational base, which fosters exploration, diversity, and inclusivity. Geographically, providing an option for BME in northeast Wisconsin gives a wide swath of students the ability to pursue higher education while staying close to home, which is a particular economic advantage to first-generation and low-income students.

Given the small nature of the department at UW Oshkosh, students have access to a wide range of support services, one-on-one advising opportunities, student clubs and organizations, and research opportunities. The department engages with a wide range of companies in the surrounding area, including women and minority-owned businesses. Students routinely engage with these and other area employers during Advisory Board meetings, guest speaker opportunities, and site visits.

The department employs a dedicated recruitment specialist, who works to reach a wide variety of potential student populations. The University also has a robust recruitment and retention program. Students in the program will have access to services on campus such as tutoring, writing assistance, Women's Center, and Academic Support of Inclusive Excellence (ASIE).

If enrollment targets are met, the department will request the recruitment of one new faculty member to start in Year 3. The college has agreed to support a new faculty hire if enrollments demonstrate the ability to support the hire. With this hire, the department will embrace the University's commitment to an inclusive faculty and staff recruitment. As stated on the UW Oshkosh employment page, "Diversity drives innovation, creativity, and progress. At the University of Wisconsin Oshkosh, the culture, identities, life experiences, unique abilities, and talents of every individual contribute to the foundation of our success. Creating and maintaining an inclusive and equitable environment is of paramount importance to us. This pursuit prepares all of us to be global citizens who will contribute to the betterment of the world. We are committed to a university culture that provides everyone with the opportunity to thrive."[4]

Collaborative Nature of the Program

The department will work actively to create transfer plans with area technical colleges to assist incoming students who have a background in BME. The new program will also encourage collaboration with other departments at UW Oshkosh by sharing lab and teaching facilities. The department will communicate continually with departments providing math and science background courses to ensure that seats will be available to students as needed and that the requirements of the program remain relevant as any changes are made to background courses in other departments.

Projected Time to Degree

Projected time to degree is four years for a full-time student who begins their higher education career with no incoming college credits and who is calculus ready. Pre-college credit (from CAPP, dual enrollment, or Advanced Placement), particularly in math and science, could shorten the degree pathway. Students who are part-time, or who begin at a math level below pre-calculus, can expect a longer time to degree completion.

Program Review

Each program at UW Oshkosh is required to conduct a self-study and commission an external review as part of a program review every seven years, as outlined in the Faculty and Academic Staff Handbook. The review includes an analysis of curriculum, assessment, resources, enrollment, alumni feedback and other measures of capacity and productivity. It is anticipated that the national ABET accreditation will be used for the external review of the program. The self-study and external program review are then reviewed by a college committee, the dean of the college, the faculty senate, and the provost. Each level of review provides its own comments and suggestions. UW Oshkosh administration members also review the program for adherence with university policy and standards.

[4] https://uwosh.edu/hr/careers/

Accreditation

The B.S.-BME program will be accredited by the Engineering Accreditation Commission (EAC) of ABET. The program will not require prior approval by the Higher Learning Commission.

JUSTIFICATION

Rationale and Relation to Mission

This proposal is driven by several factors. First, there are no other B.S. in Biomedical Engineering programs in northeast Wisconsin and only four in Wisconsin. Second, both a study commissioned by UW System and more recently by Gray Associates for UW Oshkosh have shown that there is a need for more B.S.-BME programs in Wisconsin. BME is one of the fastest growing areas of engineering. In fact, in a Gray Associates report to UW Oshkosh, BME is rated very highly in both its 100-mile radius score and its national score in terms of need.

The B.S.-BME at UW Oshkosh will contribute directly to the mission of the UW System by expanding the offerings of professional degrees to a region of Wisconsin that is currently underserved. The UW System mission statement includes a stated need to "extend knowledge and its application by developing in students heightened intellectual, cultural and humane sensitivities, science, professional and technological expertise."[5] In addition, the UW Oshkosh mission statement includes preparing students to "become successful leaders in an increasingly diverse and global society" through "innovative teaching, research, economic development, entrepreneurship and community engagement."[6] The proposed B.S.-BME program supports the university mission by contributing to the economic development of the region and by developing professional and technical skills in our students, who will be prepared to enter the workforce as practicing engineers.

The proposed program at UW Oshkosh supports major themes in the university's Strategic Plan.[7] These themes include enhancing student success (Priority A) by attracting students (Goal 1) and preparing them for today's careers, future employment, and a high quality of life (Goal 3). The program will also promote academic excellence (Priority B) by offering a challenging, globally focused curriculum (Goal 1).

University Program Array

Currently, UW Oshkosh offers three degrees in Engineering Technology (Electrical, Environmental, and Mechanical Engineering Technology). The B.S.-BME will build upon the

[5] https://www.wisconsin.edu/about-the-uw-system/

[6] https://uwosh.edu/about-uw-oshkosh/mission-vision-core-values/

[7] https://uwosh.edu/strategicplan

successful engineering technology programs while leveraging existing general education programming across the university, as well as expertise in mathematics, physics, chemistry, biology, and kinesiology. UW Oshkosh currently offers several applied, collaborative programs in medical imaging, radiologic technology, neuroscience, and electrical engineering technology that have existing corporate and healthcare agency partnerships that will be leveraged for this new program.

Other Programs in the University of Wisconsin System

Three UW System institutions currently offer B.S. in Biomedical Engineering degrees: UW-Madison, UW-Milwaukee, and UW-Eau Claire. UW Oshkosh will complement these programs by offering a B.S.-BME degree to the underserved region of northeast Wisconsin.

Need as Suggested by Current Student Demand

The proposed B.S.-BME will be the only such program in the state north and east of Madison. There are 1.3 million residents in northeast Wisconsin, which is a major hub of manufacturing in Wisconsin. Gray Associates reports 3,400 Google searches for "Bioengineering and/or Biomedical Engineering" programs within a 100-mile radius of Oshkosh in the last 3 months, putting it in the 96th percentile of all academic programs.

The B.S.-BME program will attract new students to UW Oshkosh as well as allow some current students to choose this major as opposed to leaving UW Oshkosh for similar programs elsewhere. The growing enrollment in many healthcare-related programs at UW Oshkosh demonstrates that there is significant student demand to enter healthcare-related fields, supporting the projection of a sustained enrollment of 80-100 B.S.-BME students upon full implementation, yielding 20-25 B.S.-BME graduates per year.

Need as Suggested by Market Demand

Over the past 5-10 years, BME has been ranked as one of the best jobs in America and was ranked as the 2nd best health care job in 2016, with a median salary of $86,950 by Forbes and one of the best jobs in America in 2015 by CNNMoney/PayScale.[8,9] According to the United States Department of Labor, BME graduates earn well above the average for college graduates throughout each stage of their career.[10] Initial salaries average more than $60,000, with many earning significantly more. The mean salary for a biomedical engineer is $95,090 with the top 10% of biomedical engineers earning an average of $144,350.[11]

[8] https://www.forbes.com/pictures/mkl45eklih/2-biomedical-engineer/#7acff9016bee
[9] http://money.cnn.com/gallery/pf/2015/01/27/best-jobs-2015/37.html
[10] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Biomedical Engineers, on the Internet at https://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm (visited *October 19, 2020*).
[11] https://www.bls.gov/oes/current/oes172031.htm

The Bureau of Labor Statistics projects employment of biomedical engineers will grow more than 5% (7% from Career Explorer[12]) from 2019 to 2029, faster than the average for all occupations.[13] Furthermore, BME is expected to experience significantly more job growth than other engineering disciplines in all major metro areas in Wisconsin, as well as in metro areas near Wisconsin. With increasing technological advances and the application of these technologies to medical equipment and devices, coupled with the increased medical needs of an aging population, the demand for biomedical engineers will continue to increase.

Significant demand for BME graduates from the numerous BME-related businesses in the state and region is anticipated. Some of these possible destinations include Kimberly Clark in Neenah, WI, and GE Healthcare in Milwaukee; Promega and Stealth Therapeutics, in Madison; and 3M, Boston Scientific, Medtronic, Nordson Medical, and Abbott Laboratories in the greater Minneapolis, MN metro area. Further, there are several regional businesses that manufacture or engineer products for larger companies that produce biomedical devices.

Based on a report commissioned by the UW System, BME is anticipated to see continued strong growth for the foreseeable future.[14] To quote the report, "Evidence suggests growth in biosystems engineering and similar programs, with high demand in environmental and biomedical areas…Related career fields are small but growing quickly, with the highest growth in environmental and biomedical emphases." This growth is in addition to the >200% in the past decade cited in the report.

UW Oshkosh recognizes that not all B.S.-BME graduates will want to enter the workforce directly; those graduates will be well positioned to pursue graduate work at biomedical sciences and BME programs at UW-Madison, UW-Milwaukee, Marquette University, and Michigan Tech University. There is potential for a pathway to a 5-year M.S. in BME. One such pathway is already established between the Environmental Engineering Technology program at UW Oshkosh and the M.S. in Environmental Engineering program at Michigan Tech. The proposed program will also be tailored to meet any pre-med requirements.

[12] https://www.careerexplorer.com/careers/biomedical-engineer/job-market/
[13] https://www.bls.gov/oes/current/oes172031.htm
[14] *Baccalaureate and Master's Engineering Degree Supply and Demand in Wisconsin,* report provided by the National Center for Higher Education Management Systems at the request of the University of Wisconsin System, 2014.

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University of Wisconsin - UW Oshkosh
Cost and Revenue Projections For Newly Proposed Program

	Items	Projections				
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**	8	25	25	32	35
	Enrollment (Continuing Student) Headcount	2	9	30	50	66
	Enrollment (New Student) FTE	8	25	25	32	35
	Enrollment (Continuing Student) FTE	2	9	30	50	66
II	**Total New Credit Hours**	88	275	275	352	385
	Existing Credit Hours	22	99	330	550	726
III	**FTE of New Faculty/Instructional Staff**		0.40	1.00	1.00	1.00
	FTE of Current Fac/IAS	0.125	0.00	0.00	0.00	0.00
	FTE of New Admin Staff	0.125	0.125	0.125	0.125	0.125
	FTE Current Admin Staff					
IV	**Revenues**					
	From Tuition	$31,057	$131,992	$213,517	$318,334	$392,094
	From Fees					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation					
	Total New Revenue	$31,057	$131,992	$213,517	$318,334	$392,094
V	**Expenses**					
	Salaries plus Fringes					
	Faculty/Instructional Staff	$15,225	$29,000	$116,000	$116,000	$118,320
	Other Staff	$7,306	$7,452	$7,601	$7,753	$7,908
	Other Expenses					
	Facilities		$4,000	$30,000	$15,000	$10,000
	Equipment		$30,000	$50,000	$30,000	$30,000
	Other: Marketing and Recruitment	$3,000				
	Other (please list)					
	Total Expenses	$25,531	$70,452	$203,601	$168,753	$166,228
VI	**Net Revenue**	$5,526	$61,540	$9,915	$149,580	$225,866

Submit budget narrative in MS Word Format

Provost's Signature: John Kolar	**Date: 2/21/2023**
Chief Business Officer's Signature: DocuSigned by: Bob Roberts 83F3C8F419F349E...	**Date:** 2/21/2023 | 1:41 PM PST

COST AND REVENUE PROJECTIONS NARRATIVE
UNIVERSITY OF WISCONSIN OSHKOSH
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING

Introduction

The University of Wisconsin Oshkosh (UW Oshkosh) proposes to establish a B.S. in Biomedical Engineering (B.S.-BME). The program will complement the university's existing engineering technology offerings and aid in research, economic development, entrepreneurship, and sustainability in Wisconsin, consistent with the mission of UW Oshkosh to provide "a high-quality liberal education to all of its students in order to prepare them to become successful leaders in an increasingly diverse and global society." The proposed program at UW Oshkosh will meet emerging student demands in biomedical engineering throughout the state, especially in northeast Wisconsin. The program requirements consist of 129 credits, of which 44 credits are required to meet the general education and degree requirements for UW Oshkosh College of Letters and Science. The remaining 85 credits are specific to the B.S.-BME program. The proposed curriculum will prepare graduates to enter a wide range of careers in biomedical technology and healthcare, including medical implants and prosthetics, devices and equipment, imaging and signal processing, and organ and tissue engineering. The Association Board for Engineering and Technology (ABET) accreditation will be sought to ensure program quality. Participants in the program will be charged the standard tuition rate plus an additional $700 per semester to offset higher engineering faculty salaries and laboratory costs. The development of this program responds to a growing demand for biomedical engineers. The Bureau of Labor Statistics predicts that demand for biomedical engineers will grow more than 5% from 2019 to 2029.[1]

Section I – Enrollment

All anticipated enrollments are based on information provided by the Gray Associates Report, UW System report and available feedback from potential students that have contacted UW Oshkosh about these programs. Enrollment estimates are conservative and increased demand is expected as marketing and outreach efforts increase. The program complements other programs already offered at UW Oshkosh and will have no competition from other academic institutions in this region. The majority of students will be new to UW Oshkosh, with one or two students transferring into the program in the first year from other majors such as Biology.

[1] https://www.bls.gov/oes/current/oes172031.htm

Section II – Credit Hours

Students will complete 43 required credits in engineering and engineering technology. Dividing 43 credits by four years, a typical full-time student will take 11 credits of BME classes per year. Total credit hours were calculated by multiplying the number of new and continuing students each year by 11 credits.

Section III – Faculty and Staff Appointments

This program leverages existing faculty in engineering technology and the allied STEM departments that currently offer courses which are part of the new program. In Year 1 of this program, 0.125 FTE will be utilized from existing resources to this program. Should enrollments justify additional sections of courses in Year 2, instructional academic staff will be hired (budgeted as .40 FTE). Pending sufficient program enrollments and growth potential, an additional 1.0 FTE faculty member will be needed in Year 3. That would allow the previous 0.125 FTE to return to Engineering Technology. New courses for Biomedical Engineering would start in Year 3. This new program would require an additional 0.125 FTE of administrative support.

Section IV – Program Revenues

Tuition Revenues

For students enrolled in this program, standard undergraduate tuition and fee rates will apply. For the current academic year, residential tuition and segregated fees total $3,897.78 per semester for a full-time student enrolled in 12-18 credits. Of this amount, $3,211.08 is attributable to tuition and $686.70 is attributable to segregated fees. In addition, it is proposed that all students enrolled in the program will pay $700 per semester in additional tuition to offset the higher faculty salaries found in engineering, as well as costs associated with specialized laboratory equipment, software, and program resources that must be regularly maintained and updated.

To calculate tuition revenue in Year 1, tuition of $352.92 per credit ($3,211.08 plus $700 divided by 12 credits = $352.92) was applied to new student credit hours ($352.92 x 88 credit hours). For subsequent years, the tuition revenue for each year of the program was calculated by multiplying the sum of the total new and existing credit hours by $325.92 per credit. While the program will likely attract out-of-state students in time, only the in-state tuition rate is used to calculate a conservative estimate of revenue.

Section V – Program Expenses

Salary and Fringe Expenses

Salary is estimated based on existing salaries in the Engineering and Technology department. A 45% fringe rate is used. In Year 1, salary cost of $15,225 for faculty is anticipated ($84,000 x .125 FTE x 1.45). An additional salary cost for administrative staff is calculated using the same 45% fringe rate and the current salary of the current administrative staff member ($40,310 x .125 FTE x 1.45 = $7,306.19).

Other Expenses

In Year 1, there will be a small investment of revenue into marketing and outreach to local high schools and technical colleges. Starting in Year 2, if enrollment projections are met, funds will need to be allocated for continued maintenance and eventual replacement of some facilities, equipment, supplies, and lab infrastructure to support the program and curriculum. These expenses will be funded through new tuition revenue generated by the new program.

Section VI – Net Revenue

The net revenue in the spreadsheet is calculated by subtracting the total projected expenses from the projected revenue each year. Net revenue is used to support the operation and administration of the department, overhead expenses, and support services.

UNIVERSITY OF WISCONSIN
OSHKOSH

February 13, 2023

Jay O. Rothman, President
University of Wisconsin System Administration
1720 Van Hise Hall
1220 Linden Drive
Madison, WI 53706

Dear President Rothman,

UW Oshkosh proposes a new Bachelor of Science in Biomedical Engineering. I am writing to confirm the full commitment of the Office of the Provost and Vice Chancellor to this new addition to our program array.

The proposed program will align well with the strategic plan and mission of UW Oshkosh by expanding our programming while utilizing the expertise of our current faculty and academic staff. The program will provide new professional opportunities to the university's students and support the workforce needs of northeast Wisconsin.

The College of Letters and Science, the Academic Policies Committee and the Faculty Senate have all approved the development and implementation of the new program. The College has the resources, faculty, and courses in place to launch this program. If program growth meets projections, the resulting need for additional resources will be funded by the increased tuition revenue. Given the potential for future growth and the ability to offer it mostly through existing resources, the program will remain fiscally viable into the foreseeable future.

Finally, the proposed new Biomedical Engineering major will benefit from assessment processes and program review procedures that already exist at the college and university levels, thereby ensuring its academic quality and continuous improvement.

If you have any questions, I would be happy to discuss them with you.

John Koker

John Koker
Provost and Vice Chancellor

Cc: Dr. Tracy Davidson, Interim Associate Vice President, Academic Programs and Faculty Advancement

OFFICE OF THE PROVOST AND VICE CHANCELLOR
800 Algoma Blvd. I Oshkosh, WI 54901
PHONE (920) 424-0300 I FAX (920) 424-0247 I WEB uwosh .edu/provost

OSHKOSH | FOND DU LAC | FOX CITIES

Education Committee
March 30, 2023

Item C.5.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN CONSERVATION AND COMMUNITY PLANNING, UW-STEVENS POINT

REQUESTED ACTION

Adoption of Resolution C.5., authorizing the implementation of the Bachelor of Science in Conservation and Community Planning program at the University of Wisconsin-Stevens Point.

Resolution C.5. That, upon the recommendation of the Chancellor of UW-Stevens Point and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Conservation and Community Planning program at the University of Wisconsin-Stevens Point.

SUMMARY

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Conservation and Community Planning (CCP). The proposed B.S. in CCP will elaborate, and thereby strengthen, the existing Conservation and Community Planning emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in Conservation and Community Planning will provide students a clearly defined major and dedicated curriculum, so they are well equipped to enter the workforce as city and regional planners, land trust and advocacy staff, and conservation project managers. Demand for this elevated program is evidenced by the consistent enrollments in the current emphasis of conservation and community planning within the B.S. in Resource Management. The elevation of this emphasis to a major will fulfill market and student demand. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs that help communities become more vibrant, healthy, prosperous, and sustainable…with particular emphases at the baccalaureate level in integrated natural resources management." The proposed program also supports the Purpose Made Possible strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability…."

The 120-credit program includes the General Education Program (GEP) integrated into all UW-Stevens Point baccalaureate degree programs and requires students complete 33 credits in resource management; 18 credits in the conservation and community planning core; 10-15 credits in natural sciences, and 12-13 credits of analysis and governance. Within these requirements, students complete a four credit internship focused on providing real-world opportunities to practice skills related to conservation and community planning.

Presenter

- Dr. La Vonne Cornell-Swanson, Provost and Vice Chancellor for Academic Affairs, UW-Stevens Point

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (revised March 31, 2020, available at https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related Policies

- Regent Policy Document 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System

- UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting

ATTACHMENTS

A) Request for Authorization to Implement
B) Cost and Revenue Projections Worksheet
C) Cost and Revenue Projections Narrative
D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN CONSERVATION AND COMMUNITY PLANNING AT UNIVERSITY OF WISCONSIN-STEVENS POINT PREPARED BY UW-STEVENS POINT

ABSTRACT

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Conservation and Community Planning (CCP). The proposed B.S. in CCP will elaborate, and thereby strengthen, the existing CCP emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in CCP will provide students a clearly defined major and dedicated curriculum, so they are well equipped to enter the workforce as city and regional planners, land trust and advocacy staff, and conservation project managers. Demand for this elevated program is evidenced by the consistent enrollments in the current emphasis of CCP within the B.S. in Resource Management. The elevation of this emphasis to a major will fulfill market and student demand. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs that help communities become more vibrant, healthy, prosperous, and sustainable…with particular emphases at the baccalaureate level in integrated natural resources management." The proposed program also supports the *Purpose Made Possible* strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability…." The 120-credit program includes the General Education Program (GEP) integrated into all UW-Stevens Point baccalaureate degree programs and requires students complete 33 credits in resource management; 18 credits in the CCP core; 10-15 credits in natural sciences, and 12-13 credits of analysis and governance. Within these requirements, students complete a four-credit internship focused on providing real-world opportunities to practice skills related to CCP.

PROGRAM IDENTIFICATION

University Name
University of Wisconsin-Stevens Point

Title of Proposed Academic Degree Program
Bachelor of Science in Conservation and Community Planning

Degree Designation(s)
Bachelor of Science

Mode of Delivery
Single university
Face-to-face delivery

Department or Functional Equivalent
Human Dimensions of Natural Resource Management (Discipline)

College, School, or Functional Equivalent
College of Natural Resources

Proposed Date of Implementation
May 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. The projections for new students, continuing student attrition, graduation, and progress through the program are based on student enrollment behavior in the existing CCP emphasis within the B.S. in Resource Management. As noted in the accompanying budget narrative, projections for new student enrollment are conservative based upon established new student enrollment in the existing emphasis. In Year 1, eight new students are projected to enroll in the program. By the end of Year 5, it is expected 64 new students will have enrolled in the program and 30 students will have graduated. The average student attrition rate within the program is projected to be 4% per year—an estimate that mirrors rates in the existing CCP emphasis within the B.S. in Resource Management degree program.

It is predicted that elevation of the existing emphasis to a full degree option will lead to a modest increase in new student enrollment over time. The elevation of an existing emphasis to degree program will take advantage of the same set of resources currently staffing the emphasis. The Cost and Revenue Projections spreadsheet and associated budget narrative provide additional details.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	8	10	12	16	18
Continuing Students	0	8	17	28	32
Total Enrollment	8	18	29	44	50
Graduating Students	0	0	0	10	20

Tuition Structure

For students enrolled in the B.S. in CCP program, standard baccalaureate tuition and fee rates will apply. For the current academic year, in-state residential tuition and segregated fees total $4,188.24 per semester for a full-time student enrolled in (12-18) per semester. Of this full-time semester amount, $3,349.08 is attributable to tuition, $766.56 is attributable to segregated fees, and $72.60 is attributable to textbook rental.

Nonresident tuition and segregated fees total $8,540.04 per semester for a full-time student enrolled in (12-18) per semester. Of this full-time semester nonresident tuition amount, $7,700.88 is attributable to tuition and $766.56 is attributable to segregated fees, and $72.60 is attributable to textbook rental. For part-time nonresident students, the per-credit tuition rate that includes applicable segregated fees is $709.79 per credit.

In accordance with UW System Administrative Policy 825 (Special Course Fees), some individual courses may charge additional course fees, such as access fees, fees for online materials, transportation and admission costs incurred for required, instructional field trips, and for project materials that result in tangible products retained by the students in a course.

DESCRIPTION OF PROGRAM

Overview of the Program

There are no prerequisites for entry into the B.S. in CCP program. Students will be allowed to choose this major upon matriculating to UW-Stevens Point either as a first-year or transfer student.

The proposed program will be a 120-credit B.S. in CCP. The curriculum will be composed primarily of College of Natural Resources (CNR) courses, but also include those from other disciplines such as political science and geography. Students will complete the General Education Program (GEP) required of all baccalaureate degree programs at UW-Stevens Point. They will also take courses in science (10-15 credits), core foundational CCP (18 credits), and analysis and governance (12-13 credits), which will provide the range of foundational knowledge expected of all CNR CCP students. All students will engage in a required applied professional experience internship (four credits). The proposed program curriculum will permit students to focus on a few primary areas that develop key knowledge (e.g., resource policy, public administration, and environmental politics and policy), skills (e.g., remote sensing), and abilities (e.g., sustainable design) integral to a career in CCP. Additionally, the program will provide elective choices within some of the core areas which will provide flexibility for students wanting to emphasize different areas of CCP (e.g., community planners, conservation project managers, zoning administrators, land stewardship managers) or to develop areas of concentration through minors (e.g., soil science, geographical information systems, etc.) or through certificates (climate change, energy policy, etc.).

Student Learning Outcomes and Program Objectives

The B.S. in CCP program will retain the existing and established program outcomes of the B.S. in Resource Management. These program outcomes, and evidence of a graduates' level of preparation, will be demonstrated by their ability to:

- Effectively communicate with their public(s).
- Demonstrate environmental awareness/literacy.
- Exhibit professional development skills relevant to their particular major.
- Read, interpret, and analyze social science research in natural resource management.
- Explain the role of leadership, administration, and evaluation for natural resource agencies and organizations.
- Develop confidence in the knowledge, skills, and abilities needed to perform as a professional in one's chosen option within Human Dimensions of Natural Resource Management discipline. (This discipline focuses on human connections – sociological and economic - to natural resource use, management, and conservation.)

Specific to the B.S. in CCP, students will be able to:

- Describe the historical evolution of urbanization and of city, rural and regional planning in the United States.
- Discuss various theories, ideologies, and philosophies about planning.
- Explain the socio-political and legal dimensions of human settlements and land use.
- Explain distinctions and relationships between the planning process and plan implementation and policies.
- Explain the definitions of planning, its purpose, and its dimensions.
- Apply common land use planning protocols to community issues.
- Demonstrate an ability to break down complex real-world problems into research-worthy questions and make them meaningful to stakeholders.
- Demonstrate an ability to gather, analyze, and document appropriate data/information for local planning purposes.
- Analyze land-use issues in quantitative terms.
- Analyze actual community proceedings regarding land use and planning.
- Analyze interrelated areas of planning from housing to transportation to environment.
- Identify and define planning problems, generate alternative solutions, and evaluate the consequences.
- Evaluate a variety of land conservation tools, such as zoning or conservation easements.
- Examine and evaluate the primary implementation tools of planning.
- Create map products that communicate land-use issues.
- Demonstrate an ability to create and implement funding strategies to carry out planning implementation goals.

Program Requirements and Curriculum

Program requirements for the proposed B.S. in CCP will provide students with focused coursework in core areas to develop the key knowledge, skills, and abilities integral to a career in CCP. Elevating the existing planning option to a stand-alone major will bring greater prominence to CCP as the need for more planners has emerged for many Wisconsin local governments.

The Center for Land Use Education (CLUE) is a joint venture of the College of Natural Resources at the UW-Stevens Point and the UW-Madison Division of Extension. It is a focal point for land use planning and management education and for over 20 years the faculty associated with the UW-Stevens Point CLUE have instructed students, trained local government officials and communities, created a variety of publications, and conducted applied research focused on planning and zoning issues. UW-Stevens Point CLUE staff are key partners with statewide land use organizations, so that students graduate prepared to work with many of these partners and rise to leadership positions throughout Wisconsin. This program provides an impactful example of the Wisconsin Idea at work in CCP.

Table 2 illustrates the program curriculum for the proposed program. The 120-credit B.S. in CCP includes 37 credits associated with the General Education Program (GEP). Of those 37 credits, only 13 are enumerated in Table 2 because the category requirements are also fulfilled through specific major program coursework. These courses are identified in Table 2 with an *. Additionally, some students may require fewer GEP credits than remain listed depending on testing placement and any prior credits earned before matriculation to UW-Stevens Point. The proposed program also includes 33 credits derived from the core resource management courses required of all natural resource majors.

Table 2: Bachelor of Science in CCP Program Curriculum

General education courses required for graduation (13 credits):		
ENGL 101	Academic Reading and Writing (Freshman English)	3 credits
ENGL 202	Academic Writing and Research (Sophomore English)	3 credits
Various	Arts Requirement	3 credits
Various	Wellness Requirement	1 credit
Various	Historical Perspectives Requirement	3 credits
Various	Quantitative Literacy Requirement	0 credits*
Various	Humanities Requirement	0 credits*
Various	Social Sciences Requirement	0 credits*
Various	Natural Sciences Requirement	0 credits*
Various	Global Awareness Requirement	0 credits*
Various	U.S. Diversity Requirement	0 credits*
Various	Environmental Responsibility Requirement	0 credits*
Various	Critical Thinking Requirement	0 credits*

Program prerequisites or support courses–Resource Management Core (33 credits):		
NRES 150	People, Resources and the Biosphere	3 credits
NRES 151	Ecological Basis for Natural Resource Management	3 credits
NRES 250	Introduction to Fisheries, Forestry, and Wildlife Resources	4 credits
NRES 251	Introduction to Soil and Water Resources	4 credits
NRES 320	Natural Resources Public Relations and Social Science	3 credits
NRES 383	Organizational Leadership	3 credits
NRES 389	Methods in Social Science	3 credits
GEOG 100	Human Impacts on the Physical Environment **or**	3 credits
GEOG 105	The Dynamic Earth	3 credits
FOR 319	Land Surveying	1 credit
FOR 320	Field Experience in Forest Measurement	1 credit
NRES 405	Selected topics in Natural Resources	1 credit
SOIL 359	Soil Conservation and Watershed Inventory Methods	1 credit
SOIL 360	Field Experience in Soil Inventory Methods	1 credit
WATR 380	Field Experience in Aquatic Ecosystem Evaluation	1 credit
WLDL 340	Field Experience in Wildlife Management Techniques	1 credit
Academic program course requirements–CCP Core (18 credits):		
NRES 200	Introduction to Sustainable Communities	3 credits
NRES 365	Environmental Policy	3 credits
NRES 394	Ecological Basis for Planning and Design	3 credits
NRES 484	Natural Resources Planning	3 credits
NRES 488	Land Use Plan Implementation	3 credits
NRES 489	Applied Natural Resources Planning	3 credits
Academic program course requirements–Foundational Science Courses (10-15 credits):		
Various	Biology courses	5-10 credits
Various	Basic Chemistry and Physics	5 credits
Academic program course requirements–Analysis and Governance Courses (12-13 credits):		
Various	Coursework in Economics, Statistics, GIS	9-10 credits
Various	Coursework in Policy, Law, Government	3 credits
Professional Experience (4 credits)		
NRES 381	Internship in Natural Resources	4 credits
Planning Electives (9 credits)		
Various	Program coursework electives in geography, history, political science, philosophy, and natural resources	9 credits
Institutional/General Electives (15-21 credits)		
Various	General course electives outside major program requirements	15-21 credits
Total Credits		120 credits

Assessment of Outcomes and Objectives

Student learning outcomes and program objectives will be assessed with performance measures such as tests, quizzes, reports, oral presentations, projects, exercises, demonstrations, and essays. Additionally, students must complete an internship experience in CCP at sites such as city, village, and county planning and zoning departments, regional planning commissions, land trusts, and state agencies, such as the Department of Transportation, Environmental Services. Students engaged in the internships are frequently involved in creating zoning and land-use plans with various governmental partners.

The institutional protocol for program assessment is described in the *University Handbook* (Chapter 7, Section 2),[1] and additional information and resources are available on the Academic Affairs Assessment of Program Learning Outcomes website.[2] At UW-Stevens Point, the assessment of student learning provides the foundation for all academic planning and decision-making and ensures the continuous improvement of student learning by refining the courses, programs, and policies that make student learning possible. For each major, an annual assessment report is required for at least one program learning outcome (PLO) that describes assessment methods, results, and actions taken to enhance student achievement. The department develops an assessment plan that describes when each program learning outcome will be assessed and reported within the five-year cycle. Assessment reporting is designed to emphasize improvement in instruction, curriculum, and assessment procedures as well as "closing the loop" to ensure an evidenced-based approach to program management by its faculty.

Diversity

Diversity, equity, inclusion (DEI), and justice awareness/appreciation are important to a career in CCP where the goal is to engage and plan with all members of the public. Coursework in CCP incorporates DEI in terms of planning process and community engagement as well as the history of redlining and other policies that created and maintained segregated neighborhoods. In the curriculum the faculty integrates the importance of understanding and working with people with different cultures, beliefs, races, ethnicities, gender identities, religion, age, or socioeconomic status. Examples of this approach include courses focused people, resources, and the biosphere (NRES 150), on the ecological basis for natural resource management (NRES 151), on the ecological basis for planning and design (NRES 394) and environmental ethics (PHIL 380).

CCP students practice their skills with an array of sites in diverse communities. Each year in the planning capstone course, students work with a community client and use engagement and planning skills to foster an open and inclusive dialogue. For example, a team of students currently enrolled in the existing option have been evaluating (across several counties) how current county government approach to wetland management is evidence through a comparative evaluation of existing zoning plans and ordinances.

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[1] https://catalog.uwsp.edu/content.php?catoid=21&navoid=989#section-2-assessment

[2] https://www.uwsp.edu/acadaff/Pages/assessmentLearning.aspx

The university recognizes the importance of diversity and is implementing the strategic plan, *Purpose Made Possible,*[3] that embodies goals to increase student diversity. Among them:

- We will increase and expand access by enhancing strategic partnerships with high schools and other educational institutions that support college-bound student success, college completion, and enrollment growth for a diverse student body.
- We will develop and implement internal systems and structures to better serve diverse prospective students in our market.
- We will build and enhance a community that values inclusion, equity and diversity.
- In our internal and external collaborations, we will focus on our commitment to be more inclusive and promote equity and diversity.

UW-Stevens Point has very recently initiated an inclusive Teaching Fellows Program that intentionally provides teaching and tenure-track opportunities for faculty from underrepresented groups.[4] Inclusive Teaching Fellows will serve as lecturers in the classroom and take part in a rigorous professional development experience that includes mentoring in their respective academic departments, participation in shared governance, and opportunities to engage students and the broader community.

In 2021, the College of Natural Resources formed an Equity, Diversity, and Inclusion (EDI) committee to develop an action plan that helps to raise awareness about social justice issues, particularly as they relate to natural resources and paper science/chemical engineering. The purpose of this EDI Action Plan is to provide a set of goals, strategies, and tasks to guide the college in addressing recruitment, retention, and curriculum. These guidelines align with the Academic Affairs Strategic Plan for EDI (Aug. 2020), particularly the following UWSP campus goals:

- Improve recruitment and retention of underrepresented faculty and academic staff.
- Ensure that all UWSP students, regardless of major or program, have high quality academic engagement with social justice content.
- Refine teaching and academic support models to mitigate achievement and retention gaps for underrepresented and underserved students.

Collaborative Nature of the Program

The faculty teaching the CCP emphasis within the B.S. in Resource Management have developed a good relationship with faculty teaching in geography, the GIS Center, political science, and interior architecture. In addition, both primary faculty members have part-time appointments in the Center for Land Use Education (CLUE), which is funded through the UW's Division of Extension. This opens collaborations across the state and with other partners with which CLUE works. As designed, the proposed program is a single institution offering and no other inter-institutional collaborations are currently planned.

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[3] *A Purpose Made Possible* at: https://www.uwsp.edu/strategic-planning/Documents/PurposeMadePossible-6-2021.pdf

[4] https://www3.uwsp.edu/citl/Pages/InclusiveTeachingFellows.aspx

Projected Time to Degree

Full-time students may complete the proposed B.S. in CCP in four years. All required courses will be regularly offered, making it possible for part-time students to complete the program at a slower pace than full-time students, but enjoy broad course availability while they proceed through the program on a part-time basis. It is assumed that students transferring into the major in the sophomore or junior year will have already fulfilled a large subset of the general education requirements. College of Natural Resources transfer students will be advised by professional advisors in the Student Success Center.

Program Review

The proposed B.S. in CCP program will be reviewed annually by the College of Natural Resources to assure the program is financially sustainable and providing value to students. The proposed program will also be reviewed by UW-Stevens Point governance structures, including two subcommittees of the Academic Affairs Committee, the Department Review Subcommittee and the Assessment Subcommittee. These committees oversee program quality and the processes by which students' acquisition of the learning outcomes are measured. The Department Review Subcommittee requires a complete self-study of all aspects of every degree program within a department every five years. The Assessment Subcommittee requires annual reports from all academic programs of at least one learning outcome per year, and all learning outcomes are measured and reported on a five-year cycle. The outcomes of the annual assessments (of at least one program learning outcome) and five-year full-cycle reviews of all learning outcomes are used to provide steps for improvement of curriculum, advising and student success, facilities, and faculty quality and performance.

Accreditation

No specialized accreditation is being sought and no prior approval to implement this program from HLC is required.

JUSTIFICATION

Rationale and Relation to Mission

The UW System Mission calls on each institution to provide methods of instruction, research, extended training and public service designed to educate people and improve the human condition.[5] UW-Stevens Point campus is committed to helping communities thrive by providing education, research and outreach in a wide array of disciplines, with particular emphases at the baccalaureate level in integrated natural resources management.[6] As stated in the *Purpose Made Possible: A Plan for Strategic Action*, "UW-Stevens Point is a catalyst for resilient and innovative Central and Northern Wisconsin communities, relied upon as a thought leader and responsive partner on issues including health and wellness, economic vitality,

[5] UW System Mission at: https://www.wisconsin.edu/regents/download/policy_attachment/All-Mission-Statements.pdf

[6] UWSP Mission at: https://www3.uwsp.edu/about/Pages/missionStatement.aspx

and environmental stewardship".[7] The College of Natural Resources takes an interdisciplinary approach to education and emphasizes hands-on field experiences to prepare CCP students to thrive and contribute to their local, state, and global communities.

University Program Array

The proposed program will fit well within the Human Dimension of Natural Resource Management (HDNRM) discipline, as the existing emphasis currently does. No additional new courses will be necessary, and the required course work is taught annually by HDNRM faculty. Graduates of the proposed program will be well-prepared to continue studies through either the Master's in Natural Resources (M.N.R.) program or the Ed.D. in Educational Sustainability doctorate.

Other Programs in the University of Wisconsin System

If approved, the B.S. in CCP will be the only program within the UW System array that has the CIP Code 03.0206 (Land Use Planning and Management/Development). UW-Milwaukee currently has a baccalaureate program in Freshwater Sciences with a CIP Code of 03.0205 (Water, Wetlands, and Marine Resources Management).

Need as Suggested by Current Student Demand

The proposed CCP program is intended to serve as an elaboration of an existing emphasis within the B.S. in Resource Management degree program. The natural resources planning option has had consistent enrollment, averaging 45+ majors since 2000. However, the terminology of a program option rather than a major has created marketing challenges. Additionally, the proposed B.S. in CCP program will more accurately communicate the competitiveness of students in the job market to employers and the resultant skills and experiences they have developed.

Need as Suggested by Market Demand

The range of employment opportunities for this proposed major varies across the market, workforce, and industry. Nationally there were 39,100 people employed as Urban and Regional Planners in 2020 and this is projected to increase 4% to 41,900 by 2030, which is about average for all occupations. [8] Nationally there were 39,000 people employed as Conservation Scientists in 2020.[9] This is projected to increase 7% to 41,900 by 2030, which is about average for all occupations.

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[7] *Purpose Made Possible* Strategic Plan at: https://www3.uwsp.edu/strategic-planning/Pages/Plan-for-straegic-action.aspx

[8] Bureau of Labor Statistics (2022). Occupational Outlook Handbook: conservation scientists. Retrieved from https://www.bls.gov/ooh/life-physical-and-social-science/urban-and-regional-planners.htm

[9] Bureau of Labor Statistics (2022). *Occupational Outlook Handbook: conservation scientists.* Retrieved from https://www.bls.gov/ooh/life-physical-and-social-science/conservation-scientists.htm

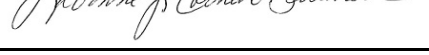
Currently, there are over 200+ planning alumni working throughout Wisconsin and in many other states, including Alaska, Colorado, and Oregon. These planning alumni are Directors of County Planning and Zoning Departments, County Zoning Administrators, and Community Development Directors who are now hiring graduates from the program from which they graduated. In 2018 in Wisconsin, 381 people were employed as Urban and Regional Planners.[10] This is expected to increase by 7.35% to 409 by 2028. The proposed B.S. in CCP is well-positioned to meet the increased need for well-trained and skilled community planners.

[10] Job Center of Wisconsin. (2022). Wisconsin long term occupation employment projections, 2018-2028 [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query

University of Wisconsin - Stevens Point
Cost and Revenue Projections for B.S. in Conservation and Community Planning

	Items	Projections				
		2023	2024	2025	2026	2027
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**	8	10	12	16	18
	Enrollment (Continuing Student) Headcount	0	8	17	28	32
	Enrollment (New Student) FTE	8	10	12	16	18
	Enrollment (Continuing Student) FTE	0	8	17	28	32
II	**Total New Credit Hours**	237	152	301	254	286
	Existing Credit Hours		237	389	690	944
III	**FTE of New Faculty/Instructional Staff**					
	FTE of Current Fac/IAS	0.26	0.38	0.72	1.20	1.49
	FTE of New Admin Staff					
	FTE Current Admin Staff	0.2	0.2	0.2	0.2	0.2
IV	**Revenues**					
	From Tuition	$49,753	$81,663	$144,852	$198,174	$258,214
	From Fees					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation					
	Total New Revenue	$49,753	$81,663	$144,852	$198,174	$258,214
V	**Expenses**					
	Salaries plus Fringes					
	Faculty/Instructional Staff	$22,312	$34,814	$68,187	$118,386	$152,419
	Other Staff	$15,994	$16,650	$17,327	$18,024	$18,741
	Other Expenses					
	Facilities					
	Equipment	$0	$0	$0	$0	$0
	Supplies & Expenses	$15,000	$15,000	$15,000	$15,000	$15,000
	Other Expenses					
	Total Expenses	$53,306	$66,464	$100,514	$151,410	$186,160
VI	**Net Revenue**	-$3,553	$15,199	$44,338	$46,764	$72,054

Submit budget narrative in MS Word Format

Provost's Signature: 

Date: **3/3/2023**

COST AND REVENUE PROJECTIONS NARRATIVE
UNIVERSITY OF WISCONSIN-STEVENS POINT
BACHELOR OF SCIENCE IN CONSERVATION AND COMMUNITY PLANNING

Introduction

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Conservation and Community Planning (CCP). The proposed B.S. in CCP will elaborate, and thereby strengthen, the existing CCP emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in CCP will provide students a clearly defined major and dedicated curriculum, so they are well equipped to enter the workforce as city and regional planners, land trust and advocacy staff, and conservation project managers. Demand for this elevated program is evidenced by the consistent enrollments in the current emphasis of CCP within the B.S. in Resource Management. The elevation of this emphasis to a major will fulfill market and student demand. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs that help communities become more vibrant, healthy, prosperous, and sustainable…with particular emphases at the baccalaureate level in integrated natural resources management." The proposed program also supports the *Purpose Made Possible* strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability…." The 120-credit program includes the General Education Program (GEP) integrated into all UW-Stevens Point baccalaureate degree programs and requires students complete 33 credits in resource management; 18 credits in the CCP core; 10-15 credits in natural sciences, and 12-13 credits of analysis and governance. Within these requirements, students complete a four-credit internship focused on providing real-world opportunities to practice skills related to CCP.

Section I – Enrollment

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. The projections are based on current enrollments in the CCP emphasis. A conservative enrollment assumption demonstrates the financial viability of the B.S. in CCP starting in Year 2. The budget assumptions include a conservative approach to revenues, with projected student enrollments based on recent historical numbers. The B.S. in CCP will provide students with increased skills to successfully achieve goals in their CCP careers. This increased preparedness will result in modest increased demand for the B.S. in CCP degree relative to the existing CCP emphasis within the B.S. in Resource Management. However, a conservative enrollment forecast is used to demonstrate the financial viability of the major program.

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. In Year 1 of the major program, eight new incoming students are projected to declare a B.S. in CCP. Projections for new students are consistent with recent freshman and transfers declaring the existing CCP emphasis. This provides eight students in Year 1 of the major program, approximately consistent with current enrollment for the CCP program. Table 1 assumes low levels of attrition (approximately 4% per year) and is based on actual attrition rates from the existing CCP emphasis. Beginning in Year 4, approximately 35% of continuing students are assumed to graduate each year, which is consistent with historical graduation percentages for students enrolled in the CCP emphasis.

Table 1: Five-Year Projected Student Enrollments

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
Enrollment (New Student) Headcount	8	10	12	16	18
Enrollment (Continuing Student) Headcount	0	8	17	28	32
Total Enrollment	8	18	29	44	50
Enrollment (New Student) FTE	8	10	12	16	18
Graduating	0	0	0	10	20
Attrition	0	1	1	2	2

Section II – Credit Hours

Table 2 represents student credit hour projections for the next five years. The projections are based on the annual total number of new and continuing students in the program multiplied by the average credit hours generated per student enrolled in the major program courses each year. The student credit hours generated by students enrolled in new courses (i.e., New Credit Hours) for Years 1-5 are provided in Table 2 and are 237, 152, 301, 254, and 286, respectively. Total credit hours (used for calculation of tuition revenue for the program) are the sum of new and existing credit hours (also depicted in Table 2).

Relative to the existing CCP emphasis, the proposed B.S. in CCP will not result in new additional courses or sections. Due to the consistent offering of required courses in the proposed program, the frequency and timing of electives is expected to change, but not the total number of courses offered in a given semester.

The proposed B.S. in CCP may result in a change to a given faculty member's schedule relative to the existing emphasis. However, faculty staffing changes are not required for implementation of the proposed B.S. in CCP.

Table 2 Five-Year Credit Hours

Credit Hours	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Total New Credit Hours (# students x # of new credit hours)	237	152	301	254	286
Existing Credit Hours (# of students x # of existing credit hours)	0	237	389	690	944

Section III – Faculty and Staff Appointments

Table 3 represents faculty and staff appointments relevant to the proposed B.S. in CCP for the next five years (FTE values listed in Table 3 are rounded. Values used for calculation of instructional expenses below are unrounded). The projections in Year 1 reflect a transition of existing faculty and staff currently allocated to the CCP emphasis. Faculty staffing and administrative support changes are not required for implementation of the proposed B.S. in CCP therefore no new faculty or staff are required for the major.

Table 3 Faculty and Staff Appointments

FTE	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
FTE of New Faculty/Instructional Staff	0	0	0	0	0
FTE of Current Fac/IAS	0.26	0.38	0.72	1.20	1.49
FTE of New Admin Staff	0	0	0	0	0
FTE Current Admin Staff	0.2	0.2	0.2	0.2	0.2

Section IV – Program Revenues

Table 4 includes projected revenues relevant to the proposed program in CCP for the next five years. The projection in Year 1 reflects only the contribution of tuition revenue of new students and the projections for Years 2 through 5 reflect the contributions of tuition revenue from both new and continuing students.

Table 4 Program Revenues

Revenues	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
From Tuition	$49,753	$81,663	$144,852	$198,174	$258,214
From Fees					
Program Revenue – Grants					
Program Revenue – Other					
Reallocation					
Total Revenue	$49,753	$81,663	$144,852	$198,174	$258,214

For students enrolled in the B.S. in CCP, standard tuition and fee rates will apply. For the current academic year, the residential tuition and segregated fees total $4,188.24 per semester for full-time, resident, undergraduate students enrolled in 12-18 credits per term. Of this total per-semester amount, $766.56 is attributable to segregated fees, $72.60 is attributable to textbook rental, and $3,349.08 is attributable to tuition.

As noted in the authorization narrative, in adherence to Regent Policy 32-7, and as previously approved by the Board of Regents, for the purpose of revenue calculations, differential tuition is not included in the tuition rate. That is, for the purpose of tuition revenue calculations, only $3,149.08 of the $3,349.08 published resident tuition amount per semester is applied to the revenue calculations because $200/semester per full-time student is attributable to differential tuition, and this amount is specifically directed to advising, financial aid, and high-demand courses as approved by the Student Government Association.

The calculated annual tuition revenue generated by the academic program is based upon the student FTE, the annual base resident tuition rate (adjusted for plateau), and the number of credits generated within the proposed major for each year (described more fully below). Due to the conservative nature of the budget, tuition rates and other sources of program revenue are held constant over the next five years.

Calculations for predicted revenue generated by the program account for the credit plateau for undergraduate tuition. For budgeting purposes, the per-credit value for undergraduate resident tuition revenue is $3,149.08/15 credits = $209.93/credit. The $209.93/credit figure is then multiplied by the number of student credit hours produced by the total students enrolled in the major each year. For Year 1, the projected revenue calculation is ($209.93/credit) X 237 credit hours (produced by students enrolled in the major in Year 1) = $49,753. Revenue projections for each subsequent year (i.e., Years 2-5) are calculated by multiplying $209.93/credit x total credit hours (new and existing, credit hour values are also recorded in Table 2). Due to annual increases in enrolled students and student credit hour generation, after Year 1 the projected tuition revenue continues to modestly increase in each subsequent year of the program, and the revenue projected for Year 5 of the program is $258,214.

While this program will be delivered primarily through face-to-face classes, some courses will be available in hybrid and 100% online modalities. As previously approved by UW System, to offset distance programming, infrastructure, and marketing expenses, UW-Stevens Point assesses a $50/credit distance education fee for courses offered in the 100% online modality. Additionally, in accordance with UW System Administrative Policy 825 (Special Course Fees), some individual courses may charge additional course fees, such as access fees for online materials, transportation and admission costs incurred for required field trips for course instruction, and for materials for projects that result in tangible

products retained by the students in a course. No additional grants, extramural funding, program revenue, or repurposed GPR are planned or budgeted.

Section V – Program Expenses

Table 5 shows expenses relevant to the proposed B.S. in CCP for the next five years. The projections in Year 1 reflect relatively few new costs incurred in the creation of the program, as the proposed program is only replacing costs already applicable to providing the CCP emphasis. The new B.S. in CCP will be taught with existing faculty and staff and will use existing facilities and supplies. The primary expenses currently included in the budget are those directly associated with instruction. However, our internal review of the overall costs of academic programs also takes into account indirect costs (such as facilities, student support services, and administrative costs) that are necessary to support the academic programs. These indirect costs are not reflected below. Instructional and support staff salaries are budgeted with increases due to possible pay plan increases (at 2% per year). Additionally, a 3% per annum increase is budgeted for the university personnel fringe rate.

For calculations of instructional expenses, instructional salaries are based upon the college average for instructors and include faculty and instructional academic staff salaries. The average annual instructional salary in the College of Natural Resources (CNR) is $60,000. Similarly, the non-instructional support salary is based upon the actual salaries of existing support positions in the CNR and is $55,000. As noted above, pay plan increases for salary are also budgeted annually for Years 2-5 of the program. Fringe rates for faculty and staff are budgeted at 45.4% in Year 1 and increase in Years 2-5 to 48.4%, 51.4%, 54.4%, and 57.4% respectively. Using the average instructional ($60,000) and non-instructional ($55,000) salaries multiplied by FTE and associated budgeted pay increases and fringe rate yields the entire annual staff expense. For Year 1, the instructional expense is ($60,000) x (0.255754 FTE) x (1.454) = $22,312. Instructional FTE is based on actual percent of instructional load dedicated to the new program and is not rounded in this example calculation. Instructional FTE is rounded in the Table 3 and in the accompanying single-page budget summary but remains unrounded for the purpose of expense calculations. Therefore, any differences in final salary expense calculations are due to rounding on instructional FTE.

The budgeted supplies and other expenses total $15,000 per year and include instructional and miscellaneous supplies related to natural resource management and CCP programming and instruction.

Table 5 Program Expenses

Expenses	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Salaries plus Fringes					
Faculty/Instructional Staff	$22,312	$34,814	$68,187	$118,386	$152,419
Other Staff	$15,994	$16,650	$17,327	$18,024	$18,741
Other Expenses					
Facilities	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0
Supplies & Expenses	$15,000	$15,000	$15,000	$15,000	$15,000
Other:	$0	$0	$0	$0	$0
Total Expenses	$53,306	$66,464	$100,514	$151,410	$186,160

Section VI – Net Revenue

The B.S. in CCP will provide students with increased skills to successfully achieve goals in their CCP careers. Increased program visibility and focus will result in modest increased demand for the B.S. in CCP relative to the existing area of emphasis. However, a conservative forecast approach to program revenues and expenses has been taken to demonstrate that the new major will generate net revenues consistently and similar to the existing emphasis area.

Table 6 shows net revenues derived from the proposed B.S. in CCP for the next five years. The projections reflect the tuition revenue contributions of both continuing and newly enrolled students. Net positive revenues are projected to be generated from the program beginning in Year 2 and continue through Year 5.

Table 6 Net Revenue

Net Revenue	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
	-$3,553	$15,199	$44,338	$46,764	$72,054

University of Wisconsin-Stevens Point
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To: Jay Rothman, President, University of Wisconsin System
From: La Vonne J. Cornell-Swanson, Provost & Vice Chancellor for Academic Affairs
Re: Authorization to Implement: B.S. in Conservation and Community Planning
Date: February 17, 2023

I write to make clear the firm commitment of the University of Wisconsin-Stevens Point to the proposed B.S. in Conservation and Community Planning for which we are presently seeking authorization. As noted in the proposal documents, the program request represents the elevation of an existing emphasis (Conservation and Community Planning) within the B.S. in Resource Management major. The current Conservation and Community Planning emphasis is a strong program at UW-Stevens Point and the recent observed growth in enrollment and projected need for planners are primary factors prompting the plan to elevate the existing emphasis in conservation and community planning to a fully articulated Bachelor of Science degree program.

By elevating this to a stand-alone major, it will be more visible to prospective students seeking this type of career training. Additionally, elevating this emphasis to a major would not only fulfill the market and student demand described in the authorization narrative, but it also represents an important required step towards the establishment of the first accredited undergraduate planning program in Wisconsin – through the Planning Accreditation Board (PAB). The PAB does not accredit options or emphases in planning, but only accredits majors in planning. The Association of Collegiate Schools of Planning (ACSP) advises undergraduate students seeking to become planners to enroll in a program accredited by the Planning Accreditation Board (PAB) because those from an accredited program have better employment opportunities.

This program will also augment the UW-Stevens Point institutional value of providing a student-centered environment and sustainable management of natural resources and other resources. These values are reflected throughout the College of Natural Resources (CNR), which takes an interdisciplinary approach to education and emphasizes hands-on field experiences to prepare our resource management and planning students to thrive and contribute in their local, state, and global communities. In an embodiment of the Wisconsin Idea, our staff in the UW-Stevens Point Center for Land Use Education (CLUE) are key partners with statewide land use organizations and our students graduate to work with many of these partners and rise to leadership positions throughout Wisconsin. This important work will be enhanced and promoted by new UW-Stevens Point graduates of this elevated major.

Finally, the proposed B.S. in Conservation and Community Planning will be fully integrated into our existing campus assessment and program review procedures. This will ensure its academic quality, regular evaluation, and continuous improvement.

Please let me know if you need further information. I look forward to receiving authorization from the Board of Regents for this important program. Thank you.

Education Committee
March 30, 2023

Item C.6.

NEW PROGRAM AUTHORIZATION (IMPLEMENTATION) BACHELOR OF SCIENCE IN ENVIRONMENTAL EDUCATION & INTERPRETATION, UW-STEVENS POINT

REQUESTED ACTION

Adoption of Resolution C.6., authorizing the implementation of the Bachelor of Science in Environmental Education & Interpretation program at the University of Wisconsin-Stevens Point.

Resolution C.6. That, upon the recommendation of the Chancellor of UW-Stevens Point and the President of the University of Wisconsin System, the Chancellor is authorized to implement the Bachelor of Science in Environmental Education & Interpretation program at the University of Wisconsin-Stevens Point.

SUMMARY

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Environmental Education & Interpretation (EE/I). The proposed B.S. in EE/I will elaborate and strengthen the existing environmental education and interpretation emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in Environmental Education & Interpretation will provide a clearly defined major and dedicated curriculum so students are well equipped to enter the workforce as environmental educators, environmental interpreters, and nature-based preschool teachers working at parks, zoos, schools, nature centers, museums and aquaria. Demand for this elevated program option is evidenced by consistent and growing enrollments in the existing environmental education and interpretation option within the B.S. in Resource Management. The proposed B.S. in EE/I, as an emphasis within the major, has been accredited by the North American Association for Environmental Education since 2014 and is one of only 12 in the United States. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs…at the baccalaureate level in integrated natural resources management and environmental education." The proposed program also supports the Purpose Made Possible strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability, global awareness and diversity, equity, and inclusion…."

The 120-credit program includes the General Education Program (GEP) that is integrated into all UW-Stevens Point baccalaureate degree programs and requires students to complete 33 credits in resource management; 16 credits in environmental education and interpretation core; 14-23 credits in natural sciences, and 27-33 credits in either the Informal or Formal Environmental Education & Interpretation tracks. Students complete a 12-credit senior capstone practicum that provides real-world opportunities to practice skills at a residential environmental education center and a local nature center as part of the new program.

Provost

- Dr. La Vonne Cornell-Swanson, Provost and Vice Chancellor for Academic Affairs, UW-Stevens Point

BACKGROUND

This proposal is presented in accord with UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting (revised March 31, 2020, available at https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/policy-on-university-of-wisconsin-system-array-management-program-planning-delivery-review-and-reporting-2/).

Related Policies

- Regent Policy Document 4-12: Academic Program Planning, Review, and Approval in the University of Wisconsin System

- UW System Administrative Policy 102: Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting

ATTACHMENTS

A) Request for Authorization to Implement
B) Cost and Revenue Projections Worksheet
C) Cost and Revenue Projections Narrative
D) Provost's Letter

REQUEST FOR AUTHORIZATION TO IMPLEMENT A BACHELOR OF SCIENCE IN ENVIRONMENTAL EDUCATION & INTERPRETATION AT UNIVERSITY OF WISCONSIN-STEVENS POINT PREPARED BY UW-STEVENS POINT

ABSTRACT

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Environmental Education & Interpretation (EE/I). The proposed B.S. in EE/I will elaborate and strengthen the existing emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in EE/I will provide a clearly defined major and dedicated curriculum so students are well equipped to enter the workforce as environmental educators, environmental interpreters, and nature-based preschool teachers working at parks, zoos, schools, nature centers, museums and aquaria. Demand for this elevated program option is evidenced by consistent and growing enrollments in the existing EE/I option within the B.S. in Resource Management. The proposed B.S. in EE/I, as an emphasis within the major, has been accredited by the North American Association for Environmental Education since 2014 and is one of only 12 in the U.S. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs…at the baccalaureate level in integrated natural resources management and environmental education." The proposed program also supports the *Purpose Made Possible* strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability, global awareness and diversity, equity, and inclusion…." The 120-credit program includes the General Education Program integrated into all UW-Stevens Point baccalaureate programs and requires students complete 33 credits in resource management; 16 credits in environmental education and interpretation core; 14-23 credits in natural sciences, and 27-33 credits in either the Informal or Formal EE/I tracks. Students complete a 12-credit senior capstone practicum that provides real-world opportunities to practice skills at a residential environmental education center and a local nature center as part of the new program.

PROGRAM IDENTIFICATION

University Name
University of Wisconsin-Stevens Point

Title of Proposed Academic Degree Program
Bachelor of Science in Environmental Education & Interpretation

Degree Designation(s)
Bachelor of Science

Mode of Delivery
Single university; Face-to-face delivery

Department or Functional Equivalent
Human Dimensions of Natural Resource Management (Discipline)

College, School, or Functional Equivalent
College of Natural Resources

Proposed Date of Implementation
May 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. The projections for new students, continuing student attrition, graduation, and progress through the program are based on student enrollment behavior in the existing environmental education and interpretation emphasis within the B.S. in Resource Management. As noted in the accompanying budget narrative, projections for new student enrollment are conservative based upon established new student enrollment in the existing emphasis. In Year 1, 22 new students are expected to enroll in the program. By the end of Year 5, it is expected 138 students will have enrolled and 59 students will have graduated. The average student attrition rate within the program is projected to be 4% per year—an estimate that mirrors rates in the existing environmental education and interpretation emphasis within the B.S. in Resource Management degree program.

Given the proposed B.S. in EE/I involves a similar number of credits as the existing emphasis, students currently in the emphasis are expected to initially populate the new program. It is predicted that elevating the emphasis to a full degree option will lead to a modest increase in enrollment. The elevation of an existing emphasis to degree program takes advantage of the same set of resources currently staffing the emphasis. The Cost and Revenue Projections spreadsheet and associated narrative provide additional details.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	22	26	28	30	32
Continuing Students	0	21	38	50	59
Total Enrollment	22	47	66	80	91
Graduating Students	0	7	13	18	21

Tuition Structure

For students enrolled in the B.S. in EE/I program, standard baccalaureate tuition and fee rates will apply. For the current academic year, in-state residential tuition and segregated fees total $4,188.24 per semester for a full-time student enrolled in (12-18) per semester. Of this full-time semester amount, $3,349.08 is attributable to tuition, $766.56 is attributable to segregated fees, and $72.60 is attributable to textbook rental.

Nonresident tuition and segregated fees total $8,540.04 per semester for a full-time student enrolled in (12-18) per semester. Of this full-time semester nonresident tuition amount, $7,700.88 is attributable to tuition and $766.56 is attributable to segregated fees, and $72.60 is attributable to textbook rental. For part-time nonresident students, the per-credit tuition rate that includes applicable segregated fees is $709.79 per credit.

In accordance with UW System Administrative Policy 825 (Special Course Fees), some individual courses may charge additional course fees, such as access fees, fees for online materials, transportation and admission costs incurred for required, instructional field trips, and for project materials that result in tangible products retained by the students in a course.

DESCRIPTION OF PROGRAM

Overview of the Program

There are no prerequisites for entry into the B.S. in EE/I program. Students will be allowed to choose this major upon matriculating to UW-Stevens Point either as a first-year or transfer student. The proposed 120-credit B.S. in EE/I program will offer students two career tracks: Informal or Formal EE/I. The Formal EE/I track targets students who have a passion for connecting people with nature and inspiring sustainable lifestyles. Students will specialize in the major by selecting one of two tracks focused either on Informal or Formal EE/I. If students in the formal track choose to add a second major in Early Childhood Education, they will have the opportunity to earn both degrees and a teaching license in five years.

The program's core curriculum will be primarily composed of College of Natural Resources (CNR) courses and provide a range of foundational knowledge to all CNR EE/I students. Specifically, all students will complete the General Education Program required of all baccalaureate degree programs at UW- Stevens Point. They will also take foundational biology, chemistry, or physics courses (8-15 credits), core foundational environmental education and interpretation (16 credits), and advanced biology and ecology (6-8 credits). Students pursuing the non-formal EE/I track will participate in courses attending to outdoor education, inclusivity for outdoor professionals, graphic design, environmental ethics and may include other science, natural resources, and humanities courses. Students in the formal EE/I track will participate in education methods and curriculum development, and human growth and development coursework. All students will engage in a practicum capstone course (7-12 credits). The practicum capstone course provides a unique learning experience at the Central Wisconsin Environmental Station (CWES) and Schmeeckle Reserve, working with K-12 students and

a general audience of community members. This applied experience prepares students to enter the workforce as environmental educators, environmental interpreters, and nature-based preschool teachers at parks, zoos, schools, nature centers, museums and aquaria. Another example of a high impact practice includes students working with external partners in NRES 369 Interpretive Media to design a media plan at the client's nature center, zoo, park or other related type of agency/organization.

Student Learning Outcomes and Program Objectives

The B.S. in EE/I program will elevate the existing and established program outcomes of the B.S. in Resource Management. Both the formal and informal tracks align with the North American Association for Environmental Education (NAAEE) accreditation requirements through course offerings that address environmental literacy, foundations of environmental education and fostering learning and promoting inclusivity, for example.[1]

The program outcomes, and evidence of graduates' level of preparation, will be demonstrated by their ability to:

- Effectively communicate with their public(s).
- Demonstrate environmental awareness/literacy.
- Exhibit professional development skills relevant to their particular major.
- Read, interpret, and analyze social science research in natural resource management.
- Explain the role of leadership, administration, and evaluation for natural resource agencies and organizations.
- Develop confidence in the knowledge, skills, and abilities needed to perform as a professional in one's chosen option within Human Dimensions of Natural Resource Management. This discipline focuses on human connections—sociological and economic—to natural resource use, management, and conservation.

Environmental Education outcomes specify that students will be able to:

- Apply knowledge of the complex processes and systems that comprise the environment, including human systems and their influences.
- Explain environmental education as a distinct field and know its defining characteristics and goals.
- Plan age-appropriate environmental education instruction and programs that meet specific instructional goals.
- Develop and deliver environmental education that is unbiased, accurate, and balanced.
- Empower learners to investigate environmental issues and take action based on their conclusions.
- Employ a range of instructional methods that are particularly suited to environmental education.
- Evaluate and use when appropriate a range of technologies to assist learning.

[1] Additional information on NAAEE Professional Development Guidelines may be found here: https://naaee.org/programs/guidelines-excellence

- Maximize learning by fostering an open, collaborative, inclusive, and equitable learning environment.

Interpretation outcomes specify that students will be able to:

- Develop and deliver thematic interpretive programs using creative interpretive techniques.
- Understand the purpose of interpretation including its definition, principles, and objectives.
- Recognize that visitors bring their own cultural values and experiences to the site. Provide a welcoming and safe environment for visitors and/or staff.
- Utilize public speaking techniques to effectively express ideas and concepts to a wide range of audiences. Deliver accurate and captivating programming relevant to and about the site.
- Facilitate visitors' exploration of the resource and the development of connections for themselves. Facilitate experiential, interactive, and audience co-created interpretation.
- Develop interpretive media, including brochures, signage, and websites.
- Implement new media types to embrace and engage an audience.
- Demonstrate effective writing skills across styles in different ways, techniques, and purposes.
- Understand how to use current and relevant desktop publishing software.

Program Requirements and Curriculum

Program requirements for the proposed B.S. in EE/I will provide students with focused coursework in core areas to develop the key knowledge, skills, and abilities integral to a career in environmental education and interpretation. The two proposed tracks allow students to focus their coursework on either an informal or formal environmental education and interpretation career path.

Table 2 illustrates the program curriculum for the proposed program. The 120-credit B.S. in EE/I includes 37 credits associated with the General Education Program. Of those 37 credits, only 16 are enumerated in Table 2 because the category requirements are also fulfilled through specific major program coursework. These courses are identified in Table 2 with an *. Additionally, some students may require fewer GEP credits than listed, depending on testing placement and any credits earned before matriculation to UW-Stevens Point. The proposed program also includes 33 credits derived from the core resource management courses required of all natural resource majors.

Table 2: Bachelor of Science in EE/I Program Curriculum

General education courses required for graduation (16 credits):		
ENGL 101	Academic Reading and Writing (Freshman English)	3 credits
ENGL 202	Academic Writing and Research (Sophomore English)	3 credits
Various	Arts Requirement	3 credits
Various	Wellness Requirement	1 credit
Various	Historical Perspectives Requirement	3 credits
Various	Quantitative Literacy Requirement	3 credits
Various	Humanities Requirement	0 credits*
Various	Social Sciences Requirement	0 credits*
Various	Natural Sciences Requirement	0 credits*
Various	Global Awareness Requirement	0 credits*
Various	U.S. Diversity Requirement	0 credits*
Various	Environmental Responsibility Requirement	0 credits*
Various	Critical Thinking Requirement	0 credits*
Program prerequisites or support courses–Resource Management Core (33 credits):		
NRES 150	People, Resources and the Biosphere	3 credits
NRES 151	Ecological Basis for Natural Resource Management	3 credits
NRES 250	Introduction to Fisheries, Forestry, and Wildlife Resources	4 credits
NRES 251	Introduction to Soil and Water Resources	4 credits
NRES 320	Natural Resources Public Relations and Social Science	3 credits
NRES 383	Organizational Leadership	3 credits
NRES 389	Methods in Social Science	3 credits
GEOG 100	Human Impacts on the Physical Environment **or**	3 credits
GEOG 105	The Dynamic Earth	3 credits
FOR 319	Land Surveying	1 credit
FOR 320	Field Experience in Forest Measurement	1 credit
NRES 405	Selected topics in Natural Resources	1 credit
SOIL 359	Soil Conservation and Watershed Inventory Methods	1 credit
SOIL 360	Field Experience in Soil Inventory Methods	1 credit
WATR 380	Field Experience in Aquatic Ecosystem Evaluation	1 credit
WLDL 340	Field Experience in Wildlife Management Techniques	1 credit
Academic program course requirements–EE/I Core (16 credits):		
NRES 200	Introduction to Sustainable Communities **or**	3 credits
NRES 281	Introduction to Recreation and Parks	3 credits
NRES 301	Foundations of Environmental Education I	3 credits
NRES 368	Oral Interpretation Methods	3 credits
NRES 369	Interpretive Media	4 credits
NRES 478	Environmental Issues Investigation and Action	3 credits
Academic program course requirements–Foundational Science Courses (8-15 credits):		
Various	Biology courses	5-10 credits
Various	Basic Chemistry and Physics	3-5 credits

Academic program course requirements–Advanced Biology & Ecology Courses (6-8 credits):		
Various	Flora	3-4 credits
Various	Fauna	3-4 credits
Academic program course requirements–Students choose a track		
Track 1: Informal EE/I (33 credits)		
FOR 335	Recreational Use of Forests and Parks	3 credits
NRES 302	Foundations of Environmental Education II	1 credit
NRES 305	Inclusive Practices for Outdoor Professionals	2 credits
NRES 482	Human Dimensions of Natural Resources Practicum	12 credits
NRES 483	Professional Development in Natural Resource Mgmt.	3 credits
PHIL 380	Environmental Ethics	3 credits
Various	Coursework electives in Science, Natural Resources, History, and Policy	9 credits
Track 2: Formal EE/I (27 credits)		
EDUC 205	Pluralism for Educators	2 credits
HD 265	Human Growth and Development: A Life-Span Approach	3 credits
NRES 374	Environmental Interpretation Practicum	3 credits
NRES 376	Environmental Education Practicum	4 credits
Various	Program coursework electives in Education, Math, and Natural Resources	15 credits
Institutional/General Electives (0-14 credits – Depending on options above)		
Various	General course electives outside major program requirements	0-14 credits
Total Credits		120 credits

Assessment of Outcomes and Objectives

Student learning outcomes and program objectives will be assessed with performance measures such as tests, quizzes, reports, oral presentations, projects, exercises, demonstrations, and essays. Additionally, students must complete a capstone practicum experience in EE/I at the CNR field stations, the Central Wisconsin Environmental Station (CWES) and Schmeeckle Reserve. The CWES is a residential environmental education site that hosts school groups from around Wisconsin. It is the site of the Tomorrow River Community Charter School which targets pre-Kindergarten through eighth grade. Schmeeckle Reserve is a 280-acre conservancy area that serves as a unique gathering place for community and university members. Students present hour-long programs to the public that are offered every spring and fall.

Students enrolled in the informal track will complete a 12-credit practicum focused on planning and implementing educational programs. Students in the formal track will complete two separate practicums in environmental interpretation (three credits) and environmental education (four credits). These are examples of high-impact practices that reinforce previous learning and focus on developing new EE/I programs.

The institutional protocol for program assessment is described in the *University Handbook* (Chapter 7, Section 2),[2] and additional information and resources are available on the Academic Affairs Assessment of Program Learning Outcomes website.[3] At UW-Stevens Point, the assessment of student learning provides the foundation for all academic planning and decision-making and ensures the continuous improvement of student learning by refining the courses, programs, and policies that make student learning possible. For each major, an annual assessment report is required for at least one program learning outcome (PLO) that describes assessment methods, results, and actions taken to enhance student achievement. The department develops an assessment plan that describes when each program learning outcome will be assessed and reported within the five-year cycle. Assessment reporting is designed to emphasize improvement in instruction, curriculum, and assessment procedures as well as "closing the loop" to ensure an evidenced-based approach to program management by its faculty.

Diversity

Diversity, equity, inclusion (DEI) and justice awareness/appreciation are important to a career in environmental education and interpretation where the goal is to serve and educate all members of the public. Coursework in environmental education and interpretation such as "Inclusive Practices for Outdoor Professionals" incorporate these concepts to demonstrate the importance of understanding and working with people with different cultures, beliefs, races, ethnicities, gender identities, religion, age, or socioeconomic status.

EE/I students will maximize learning by fostering an open, collaborative, inclusive, and equitable learning environment. They will also recognize that visitors bring their own cultural values and experiences to the site, and that they will provide a welcoming and safe environment for visitors and/or staff at the places they work.

EE/I students practice their skills with audiences in different settings. Programs explore topics such as birds, wildlife, plant life, natural phenomena, and people and events prominent in Central Wisconsin history. Students present lessons and programs at the CWES and Schmeeckle Reserve during a full semester practicum experience, providing a valuable experiential learning experience.

The campus recognizes the importance of diversity and is implementing the strategic plan, *Purpose Made Possible,*[4] that embodies goals to increase student diversity. Among them:

- We will increase and expand access by enhancing strategic partnerships with high schools and other educational institutions that support college-bound student success, college completion, and enrollment growth for a diverse student body.

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[2] https://catalog.uwsp.edu/content.php?catoid=21&navoid=989#section-2-assessment

[3] https://www.uwsp.edu/acadaff/Pages/assessmentLearning.aspx

4 *Purpose Made Possible* at: https://www.uwsp.edu/strategic-planning/Documents/PurposeMadePossible-6-2021.pdf

- We will develop and implement internal systems and structures to better serve diverse prospective students in our market.
- We will build and enhance a community that values inclusion, equity and diversity.
- In our internal and external collaborations, we will focus on our commitment to be more inclusive and promote equity and diversity.

The institution has very recently instituted an inclusive Teaching Fellows Program that intentionally provides teaching and tenure-track opportunities for faculty from underrepresented groups.[5] Inclusive Teaching Fellows will serve as lecturers in the classroom and take part in a rigorous professional development experience that includes mentoring in their respective academic departments, participation in shared governance, and opportunities to engage students and the broader community.

In 2021, the CNR formed an Equity, Diversity, and Inclusion (EDI) committee to develop an action plan that helps to raise awareness about social justice issues, particularly as they relate to natural resources and paper science/chemical engineering. The purpose of this EDI Action Plan is to provide a set of goals, strategies, and tasks to guide the college in addressing recruitment, retention, and curriculum. These guidelines align with the Academic Affairs Strategic Plan for EDI (Aug. 2020), particularly the following UWSP campus goals:

- Improve recruitment and retention of underrepresented faculty and academic staff.
- Ensure that all UWSP students, regardless of major or program, have high quality academic engagement with social justice content.
- Refine teaching and academic support models to mitigate achievement and retention gaps for underrepresented and underserved students.

The new EE/Interpretation program will provide opportunities for students to experience high-quality academic engagement with social justice content through courses such as NRES 305 (Inclusive Practices for Outdoor Professionals) and EDUC 205 (Pluralism for Educators). Specific courses are also designed to mitigate achievement and retention gaps for underrepresented and underserved students. For example, at the sophomore level all students will take either NRES 200 (Introduction to Sustainable Communities), a course that focuses on building community or NRES 281 (Introduction to Recreation and Parks), giving them the opportunity to build community outdoors. These courses help to form bonds between students and instructors and lead to student success.

Collaborative Nature of the Program

The faculty teaching the EE/I emphasis within the B.S. in Resource Management have developed a good relationship with faculty teaching in Early Childhood Education, College of Professional Studies. The Formal Education and Interpretation track was recently created in Fall 2021. If students in this track choose to add a second major in Early

[5] https://www3.uwsp.edu/citl/Pages/InclusiveTeachingFellows.aspx

Childhood Education, they have the opportunity to earn both degrees and a teaching license in five years.

Projected Time to Degree

Full-time students may complete the proposed B.S. in EE/I in four years. All required courses will be regularly offered, making it possible for part-time students to complete the program at a slower pace than full-time students, but enjoy broad course availability while they proceed through the program on a part-time basis. It is assumed that students transferring into the major in the sophomore or junior year will have already fulfilled a large subset of the general education requirements. CNR transfer students will be advised by professional advisors in the Student Success Center.

Program Review

The proposed B.S. in EE/I program will be reviewed annually by the CNR to assure the program is financially sustainable and providing value to students. The proposed program will also be reviewed by UW-Stevens Point governance structures, including two subcommittees of the Academic Affairs Committee, the Department Review Subcommittee and the Assessment Subcommittee. These committees oversee program quality and the processes by which students' acquisition of the learning outcomes are measured. The Department Review Subcommittee requires a complete self-study of all aspects of every degree program within a department every five years. The Assessment Subcommittee requires annual reports from all academic programs of at least one learning outcome per year, and all learning outcomes are measured and reported on a five-year cycle. The outcomes of the annual assessments (of at least one program learning outcome) and five-year full-cycle reviews of all learning outcomes are used to provide steps for improvement of curriculum, advising and student success, facilities, and faculty quality and performance.

Accreditation

The proposed B.S. in EE/I in an accredited program of the North American Association for Environmental Education. The program was re-accredited in 2020 and will be up for review again in 2027. Accreditation is based on criteria in *Professional Development of Environmental Educators: Guidelines for Excellence*.[6] The self-study audit of teaching methods and student assessment is reviewed by a panel of environmental education higher-education professionals.

[6] NAAEE Professional Development of Environmental Educators: Guidelines for Excellence at: https://eepro.naaee.org/sites/default/files/eepro-post-files/professional_development_pdf.pdf

JUSTIFICATION

Rationale and Relation to Mission

The UW System Mission calls on each institution to provide methods of instruction, research, extended training and public service designed to educate people and improve the human condition.[7] UW-Stevens Point campus is committed to helping communities thrive by providing education, research and outreach in a wide array of disciplines, with particular emphases at the baccalaureate level in integrated natural resources management and environmental education.[8] As stated in the *Purpose Made Possible: A Plan for Strategic Action*, "UW-Stevens Point is a catalyst for resilient and innovative Central and Northern Wisconsin communities, relied upon as a thought leader and responsive partner on issues including health and wellness, economic vitality, and environmental stewardship".[9] The CNR takes an interdisciplinary approach to education and emphasizes hands-on field experiences to prepare environmental education and interpretation students to thrive and contribute to their local, state, and global communities.

University Program Array

The proposed program will fit well within the Human Dimension of Natural Resource Management (HDNRM) discipline, as the existing emphasis currently does. No additional new courses will be necessary, and the required course work is taught annually by HDNRM faculty. As noted above, students enrolling in the formal education and interpretation option and choosing to also major in early childhood education will have the ability to complete both programs and become a licensed educator in five total years. Additionally, graduates of the proposed B.S. in Environmental Education and Interpretation program will be well-prepared to continue studies through either the Master's in Natural Resources (M.N.R.) program or the Ed.D. in Educational Sustainability doctorate.

Other Programs in the University of Wisconsin System

If approved, the B.S. in EE/I will be the only program (at any degree level) within the UW System array that has the CIP Code 13.1338 (Environmental Education).

Need as Suggested by Current Student Demand

The proposed environmental education and interpretation program is intended to serve as an elaboration of an existing emphasis within the B.S. in Resource Management degree program. The environmental education and interpretation program has been popular with students with enrollments as high as 106 students in 2016. While this program has been popular with students the terminology of an emphasis, rather than a major, has created

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[7] UW System Mission at: https://www.wisconsin.edu/regents/download/policy_attachment/All-Mission-Statements.pdf

[8] UWSP Mission at: https://www3.uwsp.edu/about/Pages/missionStatement.aspx

[9] *Purpose Made Possible* Strategic Plan at: https://www3.uwsp.edu/strategic-planning/Pages/Plan-for-straegic-action.aspx

marketing challenges. Furthermore, references to this program at the national and international levels include environmental education and interpretation as indicated by its associated professional organizations: The North American Association for Environmental Education (NAAEE)[10] and the National Association for Interpretation (NAI).[11] The proposed B.S. in EE/I program will strengthen the competitiveness of students in the job market by more accurately communicating to employers the experiences students have received and the skills they have developed.

Need as Suggested by Market Demand

The range of employment opportunities for this proposed major varies across the market, workforce, and industry. Nationally there were 39,000 people employed as Conservation Scientists in 2020.[12] This is projected to increase 7% to 41,900 by 2030, which is about average for all occupations. There were 354,100 people employed as Recreation Workers in 2020.[13] This is projected to increase 16% to 411,900 by 2030, which is much faster than the average. There were 254,100 people employed as Graphic Designers in 2020.[14] This is projected to increase 3% to 261,400 by 2030, which is slower.

Additionally, NAAEE's influence stretches across North America and around the world, with members in more than 30 countries. NAAEE and its 56 state, provincial, and regional Affiliate organizations in the U.S., Canada, and Mexico have more than 20,000 members. These members are professionals with environmental education responsibilities and interests across business, government, higher education, formal (K–12) education, informal education, early childhood education, science education and STEM, and other sectors of society. NAI currently serves about 6,000 members in the U.S., Canada, and over thirty other nations. Individual members include those who work at parks, museums, nature centers, zoos, botanical gardens, aquariums, historical and cultural sites, commercial tour companies, and theme parks. Commercial and institutional members include those who provide services to the heritage interpretation industry.

[10] North American Association for Environmental Education. (2022). Retrieved from https://naaee.org/

[11] National Association for Interpretation. (2022). Retrieved from https://www.interpnet.com/

[12] Job Center of Wisconsin. (2022). Wisconsin long term occupation employment projections, 2018-2028 [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query

[13] Bureau of Labor Statistics (2022). *Occupational Outlook Handbook: recreation workers.* Retrieved from https://www.bls.gov/ooh/personal-care-and-service/recreation-workers.htm

[14] Bureau of Labor Statistics (2022). *Occupational Outlook Handbook: graphic designers.* Retrieved from https://www.bls.gov/ooh/arts-and-design/graphic-designers.htm

Wisconsin has a rich legacy of environmental education. In 2019 there were over 700 environmental education organizations, employing 3,110 people.[15] In 2018, 760 people were employed as Conservation Scientists.[16] This is expected to increase by 2.89% to 782 by 2028.[17] There were 2,199 people employed at Museums and Historical sites in 2018, with a projected increase of 10.19% to 2,433 by 2028.[18] There were 6,862 people employed as Graphic Designers in 2018, with a projected increase of 0.98% to 6,929 by 2028.[19] The proposed B.S. in EE/I is well-positioned to meet the increased need for well-trained educators and interpreters employed at the regional, state, and national levels.

[15] Hougham, J., Morgan, T., Olsen, S., & Herde, I. (2019). 2019 Status and Need report of Wisconsin Environmental Education related Organizations. Madison, WI: UW-Madison Extension.
[16] Job Center of Wisconsin. (2022). *Wisconsin long term occupation employment projections, 2018-2028* [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query
[17] Job Center of Wisconsin. (2022). Wisconsin long term occupation employment projections, 2018-2028 [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query
[18] Job Center of Wisconsin. (2022). Wisconsin long term occupation employment projections, 2018-2028 [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query
[19] Job Center of Wisconsin. (2022). *Wisconsin long term occupation employment projections, 2018-2028* [Data file]. Retrieved from https://jobcenterofwisconsin.com/wisconomy/query

University of Wisconsin - Stevens Point
Cost and Revenue Projections for B.S. in Environmental Education and Interpretation

	Items	Projections				
		2023	2024	2025	2026	2027
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**	22	26	28	30	32
	Enrollment (Continuing Student) Headcount	0	21	38	50	59
	Enrollment (New Student) FTE	22	26	28	30	32
	Enrollment (Continuing Student) FTE	0	21	37	49	58
II	**Total New Credit Hours**	553	332	348	240	349
	Existing Credit Hours		553	885	1233	1473
III	**FTE of New Faculty/Instructional Staff**					
	FTE of Current Fac/IAS	0.65	0.93	1.24	1.69	2.02
	FTE of New Admin Staff					
	FTE Current Admin Staff	0.2	0.2	0.2	0.2	0.2
IV	**Revenues**					
	From Tuition	$116,091	$185,788	$258,844	$309,227	$382,492
	From Fees					
	Program Revenue (Grants)					
	Program Revenue - Other					
	GPR (re)allocation					
	Total New Revenue	$116,091	$185,788	$258,844	$309,227	$382,492
V	**Expenses**					
	Salaries plus Fringes					
	Faculty/Instructional Staff	$56,987	$84,279	$117,215	$166,434	$206,210
	Other Staff	$15,994	$16,650	$17,327	$18,024	$18,741
	Other Expenses					
	Facilities					
	Equipment	$0	$0	$0	$0	$0
	Supplies & Expenses	$15,000	$15,000	$15,000	$15,000	$15,000
	Other Expenses					
	Total Expenses	$87,981	$115,929	$149,542	$199,458	$239,951
VI	**Net Revenue**	$28,110	$69,859	$109,302	$109,769	$142,541

Submit budget narrative in MS Word Format

Provost's Signature: 

Date:
3/3/2023

COST AND REVENUE PROJECTIONS NARRATIVE
UNIVERSITY OF WISCONSIN-STEVENS POINT
BACHELOR OF SCIENCE IN ENVIRONMENTAL EDUCATION & INTERPRETATION

Introduction

The University of Wisconsin (UW)-Stevens Point proposes to establish a Bachelor of Science (B.S.) in Environmental Education & Interpretation (EE/I). The proposed B.S. in EE/I will elaborate and strengthen the existing EE/I emphasis within the B.S. in Resource Management. In doing so, the proposed B.S. in EE/I will provide a clearly defined major and dedicated curriculum so students are well equipped to enter the workforce as environmental educators, environmental interpreters, and nature-based preschool teachers working at parks, zoos, schools, nature centers, museums and aquaria. Demand for this elevated program option is evidenced by consistent and growing enrollments in the existing EE/I option within the B.S. in Resource Management. The proposed B.S. in EE/I, as an emphasis within the major, has been accredited by the North American Association for Environmental Education since 2014 and is one of only 12 in the United States. Students will specialize in the major by selecting one of two tracks focused either in Informal or Formal Environmental Education & Interpretation. If students in the formal track choose to add a second major in Early Childhood Education, they will have the opportunity to earn both degrees and a teaching license in five years. The proposed program aligns with and supports the select mission of UW-Stevens Point "to provide programs…at the baccalaureate level in integrated natural resources management and environmental education." The proposed program also supports the Purpose Made Possible strategic plan by increasing "our unique cross-disciplinary work to leverage (or promote) our strengths in sustainability, global awareness and diversity, equity, and inclusion…." The 120-credit program includes the General Education Program (GEP) that is integrated into all UW-Stevens Point baccalaureate degree programs and requires students complete 33 credits in resource management; 16 credits in EE/I core; 14-23 credits in natural sciences, and 27-33 credits in either the Informal or Formal Environmental Education & Interpretation tracks. Students complete a 12-credit senior capstone practicum that provides real-world opportunities to practice skills at a residential environmental education center and a local nature center as part of the new program.

Section I – Enrollment

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. The projections are based on current enrollments in the EE/I emphasis. The B.S. in EE/I will provide students with increased skills to successfully achieve goals in their EE/I careers. This increased preparedness will result in modest increased demand for the B.S. in EE/I degree relative to the existing EE/I emphasis within the B.S. in Resource Management. However, a conservative enrollment forecast is used to demonstrate the financial viability of the major program.

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. In Year 1 of the major program, 22 new incoming students are expected to declare a B.S. in EE/I major. Projections for new students are consistent with recent freshman and transfers declaring the existing EE/I emphasis. This provides 22 students in Year 1 of the major program, approximately consistent with current enrollment for the e EE/I emphasis. Table 1 assumes low levels of attrition (approximately 4% per year) and is based on actual attrition rates from the existing EE/I emphasis. Beginning in Year 2, approximately 35% of continuing students are assumed to graduate each year, which is consistent with historical graduation percentages for students enrolled in the EE/I emphasis.

Table 1: Five-Year Projected Student Enrollments

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
Enrollment (New Student) Headcount	22	26	28	30	32
Enrollment (Continuing Student) Headcount	0	21	38	50	59
Total Enrollment	22	47	66	80	91
Enrollment (New Student) FTE	22	26	28	30	32
Graduating	0	7	13	18	21
Attrition	1	2	3	3	4

Section II – Credit Hours

Table 2 represents student credit hour projections for the next five years. The projections are based on the annual total number of new and continuing students in the program multiplied by the average credit hours generated per student enrolled in the major program courses each year. The student credit hours generated by students enrolled in new courses (i.e., New Credit Hours) for Years 1-5 are provided in Table 2 and are 553, 332, 348, 240, and 349, respectively. Total credit hours (used for calculation of tuition revenue for the program) are the sum of new and existing credit hours.

Relative to the existing EE/I emphasis, the proposed B.S. in EE/I will not result in new additional courses or sections. Due to the consistent offering of required courses in the proposed program, the frequency and timing of electives is expected to change, but not the total number of courses offered in a given semester. The proposed B.S. in EE/I may result in a change to a given faculty member's schedule relative to the existing emphasis. However, faculty staffing changes are not required for implementation of the proposed B.S. in EE/I.

Table 2 Five-Year Credit Hours

Credit Hours	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Total New Credit Hours (# students x # of new credit hours)	553	332	348	240	349
Existing Credit Hours (# of students x # of existing credit hours)	0	553	885	1233	1473

Section III – Faculty and Staff Appointments

Table 3 represents faculty and staff appointments relevant to the proposed B.S. in EE/I for the next five years. (As noted in the section below on program expenses, FTE values listed in Table 3 are rounded. Values used for calculation of instructional expenses below are unrounded.) The projections in Year 1 reflect a transition of existing faculty and staff currently allocated to the EE/I emphasis. Faculty staffing and administrative support changes are not required for implementation of the proposed B.S. in EE/I therefore no new faculty or staff are required for the major.

Table 3 Faculty and Staff Appointments

FTE	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
FTE of New Faculty/Instructional Staff	0	0	0	0	0
FTE of Current Fac/IAS	0.65	0.93	1.24	1.69	2.02
FTE of New Admin Staff	0	0	0	0	0
FTE Current Admin Staff	0.2	0.2	0.2	0.2	0.2

Section IV – Program Revenues

Table 4 includes projected revenues relevant to the proposed B.S. in EE/I for the next five years. The projection in Year 1 reflects only the contribution of tuition revenue of new students and the projections for Years 2 through 5 reflect the contributions of tuition revenue from both new and continuing students.

Table 4 Program Revenues

Revenues	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
From Tuition	$116,091	$185,788	$258,844	$309,227	$382,492
From Fees					
Program Revenue – Grants					
Program Revenue – Other					
Reallocation					
Total Revenue	$116,091	$185,788	$258,844	$309,227	$382,492

For students enrolled in the B.S. in the EE/I program, standard tuition and fee rates will apply. For the current academic year, the residential tuition and segregated fees total $4,188.24 per semester for full-time, resident, undergraduate students enrolled in 12-18 credits per term. Of this total per-semester amount, $766.56 is attributable to segregated fees, $72.60 is attributable to textbook rental, and $3,349.08 is attributable to tuition.

As noted in the authorization narrative, in adherence to Regent Policy 32-7, and as previously approved by the Board of Regents, for the purpose of revenue calculations, differential tuition is not included in the tuition rate. That is, for the purpose of tuition revenue calculations, only $3,149.08 of the $3,349.08 published resident tuition amount per semester is applied to the revenue calculations because $200/semester per full-time student is attributable to differential tuition, and this amount is specifically directed to advising, financial aid, and high-demand courses as approved by the Student Government Association.

The calculated annual tuition revenue generated by the academic program is based upon the student FTE, the annual base resident tuition rate (adjusted for plateau), and the number of credits generated within the proposed major for each year (described more fully below). Due to the conservative nature of the budget, tuition rates and other sources of program revenue are held constant over the next five years.

Calculations for predicted revenue generated by the program account for the credit plateau for undergraduate tuition. For budgeting purposes, the per-credit value for undergraduate resident tuition revenue is $3,149.08/15 credits = $209.93/credit. The $209.93/credit figure is then multiplied by the number of student credit hours produced by the total students enrolled in the major each year. For Year 1, the projected revenue calculation is ($209.93/credit) X 553 credit hours (produced by students enrolled in the major in Year 1) = $116,091. Revenue projections for each subsequent year (i.e., Years 2-5) are calculated by multiplying $209.93/credit x total credit hours (new and existing). (Credit hour values are also recorded in Table 2). Due to annual increases in enrolled students and student credit hour generation, after Year 1 the projected tuition revenue continues to modestly increase in each subsequent year of the program, and the revenue projected for Year 5 of the program is $382,492.

While this program will be delivered primarily through face-to-face classes, some courses will be available in hybrid and 100% online modalities. As previously approved by UW System, to offset distance programming, infrastructure, and marketing expenses, UW-Stevens Point assesses a $50/credit distance education fee for courses offered in the 100% online modality. Additionally, in accordance with UW System Administrative Policy 825 (Special Course Fees), some individual courses may charge additional course fees, such as access fees for online materials, transportation and admission costs incurred for required field trips for course instruction, and for materials for projects that result in tangible products retained by the students in a course. No additional grants, extramural funding, program revenue, or repurposed GPR are planned or budgeted.

Section V – Program Expenses

Table 5 shows expenses relevant to the proposed B.S. in EE/I for the next five years. The projections in Year 1 reflect relatively few new costs incurred in the creation of the program, as the proposed program is only replacing costs already applicable to providing the EE/I emphasis. The new B.S. in EE/I will be taught with existing faculty and staff and will use existing facilities and supplies. The primary expenses currently included in the budget are those directly associated with instruction. However, an internal review of the overall costs of academic programs also takes into account indirect costs (such as facilities, student support services, and administrative costs) that are necessary to support the academic programs. These indirect costs are not reflected below. Instructional and support staff salaries are budgeted with increases due to possible pay plan increases (at 2% per year). Additionally, a 3% per annum increase is budgeted for the university personnel fringe rate.

For calculations of instructional expenses, instructional salaries are based upon the college average for instructors and include faculty and instructional academic staff salaries. The average annual instructional salary in the College of Natural Resources (CNR) is $60,000. Similarly, the non-instructional support salary is based upon the actual salaries of existing support positions in the CNR and is $55,000. Pay plan increases for salary are also budgeted annually for Years 2-5 of the program. Fringe rates for faculty and staff are budgeted at 45.4% in Year 1 and increase in Years 2-5 to 48.4%, 51.4%, 54.4%, and 57.4% respectively. Using the average instructional ($60,000) and non-instructional ($55,000) salaries multiplied by FTE and associated budgeted pay increases and fringe rate yields the entire annual staff expense. For Year 1, the instructional expense is ($60,000) x (0.653216 FTE) x (1.454) = $56,987. (Note that instructional FTE is based on actual percent of instructional load dedicated to the new program and is not rounded in this example calculation. Instructional FTE is rounded in the Table 3 and in the single-page budget summary but remains unrounded for the purpose of expense calculations. Therefore, any differences in final salary expense calculations are due to rounding on instructional FTE.)

The budgeted supplies and other expenses total $15,000 per year and include instructional and miscellaneous supplies related to natural resource management and EE/I and instruction.

Table 5 Program Expenses

Expenses	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Salaries plus Fringes					
Faculty/Instructional Staff	$56,987	$84,279	$117,215	$166,434	$206,210
Other Staff	$15,994	$16,650	$17,327	$18,024	$18,741
Other Expenses					
Facilities	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0
Supplies & Expenses	$15,000	$15,000	$15,000	$15,000	$15,000
Other:	$0	$0	$0	$0	$0
Total Expenses	$87,981	$115,929	$149,542	$199,458	$239,951

Section VI – Net Revenue

The B.S. in EE/I will provide students with increased skills to successfully achieve goals in their EE/I career. Increased program visibility and focus will result in modest increased demand for the B.S. in EE/I relative to the existing area of emphasis. However, a conservative forecast approach to program revenues and expenses has been taken to demonstrate that the new major will generate net revenues consistently and similar to the existing emphasis area. Table 6 shows net revenues derived from the proposed B.S. in EE/I for the next five years. Net positive revenues are projected for all five years budgeted in this proposal.

Table 6 Net Revenue

Net Revenue	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
	$28,110	$69,859	$109,302	$109,769	$142,541

University of Wisconsin-Stevens Point
Office of Provost and Vice Chancellor
Stevens Point WI 54481-3897
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www.uwsp.edu/admin/acadaffairs

To: Jay Rothman, President, University of Wisconsin System
From: La Vonne J. Cornell-Swanson, Provost & Vice Chancellor for Academic Affairs
Re: Authorization to Implement: B.S. in Environmental Education and Interpretation
Date: February 17, 2023

I write to make clear the firm commitment of the University of Wisconsin-Stevens Point to the proposed B.S. in Environmental Education and Interpretation for which we are presently seeking authorization. As noted in the proposal documents, the program request represents the elevation of an existing emphasis (Environmental Education and Interpretation) within the B.S. in Resource Management major. The current emphasis is a strong program at UW-Stevens Point and the sustained enrollment and the probability of additional growth have prompted the plan to elevate the emphasis to a fully articulated Bachelor of Science degree program. By elevating this to a stand-alone major, it will also become more visible to prospective students seeking careers as environmental educators.

The proposed program elevation strongly aligns with, and helps to fulfill, the select mission of UW-Stevens Point to "provide education, research and outreach in a wide array of disciplines, with particular emphases at the baccalaureate level in integrated natural resources management and environmental education…" This program will also support and expand the UW-Stevens Point institutional value of providing instruction related to sustainable resource management and educating diverse audiences about the environment. The proposed program also includes high-impact experiences – such as practica - that reinforce previous learning and prepare students to enter the workforce as environmental educators, environmental interpreters, and nature-based preschool teachers. Practica are currently conducted at the Central Wisconsin Environmental Station (CWES) and Schmeeckle Reserve and involve our students working with K-12 students and a general audience of community members.

As noted in the authorization narrative, two tracks – formal and informal – will be available to students enrolling in the B.S. in Environmental Education and Interpretation program. Both track options fulfill the North American Association for Environmental Education (NAAEE) accreditation requirements through course offerings that address environmental literacy, foundations of environmental education, fostering learning, and promoting inclusivity. Importantly, through collaborative planning by the Colleges of Natural Resources and Professional Studies (School of Education), students selecting the formal track will gain relevant skills in early childhood education and may opt to earn a teaching license by continuing to study for an additional year and completing the Department of Public Instruction (DPI) certification requirements for early childhood educators.

Finally, the proposed B.S. in Environmental Education and Interpretation will be fully integrated into our existing campus assessment and program review procedures. This will ensure its academic quality, regular evaluation, and continuous improvement.

Please let me know if you need further information. I look forward to receiving authorization from the Board of Regents for this important program. Thank you.

Education Committee **Item D.**

March 30, 2023

HOST CAMPUS PRESENTATION BY UW-STOUT: ADDRESSING EMPLOYER NEEDS FOR TALENT AND THE NEEDS OF THE STATE THROUGH THE CHAMPIONING OF STUDENT SUCCESS

REQUESTED ACTION

For information only.

SUMMARY

The presentation will briefly highlight UW-Stout's commitment to student success, with a focus on mental health and overall student well-being, within the context of UW-Stout's polytechnic mission to provide applied learning, career-focused and collaborative education. The presentation will showcase programmatic areas such as education and childcare, mental health and counseling, hospitality and tourism, and food science and nutrition. Work that is underway across both academic and student affairs will be shared and will emphasize the critical importance of resource investment, including the renovation of facilities and capital projects, to serve the students and needs of the state through a polytechnic education.

Presenters

- Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs, UW-Stout
- Sandi Scott, Dean of Students, UW-Stout

Education Committee **Item E.**
March 30, 2023

ACADEMIC PROGRAM PLANNING IN THE CONTEXT OF THE UW SYSTEM STRATEGIC PLAN

REQUESTED ACTION

For information, discussion, and to inform future decision-making.

SUMMARY

The discussion will explain the current process for academic degree program planning both at the UW System and campus levels. It will focus on how campuses identify new program areas that sustain access for students to majors and careers while efficiently managing resources. Led by campus Provosts, this discussion takes place within the context of the objectives of the UW System strategic plan to promote innovation, collaboration, and meet the needs of Wisconsin's current and future workforce.

Presenters

- Dr. Tracy Davidson, Associate Vice President, Office of Academic Affairs, UW System
- Dr. Kate Burns, Provost and Vice Chancellor for Academic Affairs, UW-Green Bay (facilitator)
- Dr. Scott Gronert, Interim Provost and Vice Chancellor for Academic Affairs, UW-Milwaukee
- Dr. Rob Ducoffe, Provost and Vice Chancellor for Academic Affairs, UW-Parkside
- Dr. Glendalí Rodríguez, Provost and Vice Chancellor for Academic Affairs, UW-Stout
- Dr. Maria Cuzzo, Provost and Vice Chancellor for Academic Affairs, UW-Superior

BACKGROUND

One objective of the UW System strategic plan[1] is to "create and disseminate knowledge that contributes to innovation." This includes strategies that promote a culture of innovation, and modifying policies that impede innovation. The plan also seeks strategies that advance economic prosperity in Wisconsin, and engaging with employers and other higher education institutions to develop academic programs that meet talent needs.

[1] wisconsin.edu/president/strategic-plan/

Understanding and improving the process for campuses to develop, implement, and evaluate academic degree programs is one important way to work towards these strategic objectives.

The discussion will begin with UW System leadership providing an overview of the current process for academic program planning and review at the UW System level. This will include a snapshot of the current array and its evolution over the past several years. Then, provosts will share how program array planning is implemented on the campus level, including examples of programs that have been approved and eliminated. Provosts will also explain proposed improvements to the current planning process that would both streamline the process for campuses and allow for more responsiveness to changing student and workforce needs. The discussion will include robust conversation with Regents, and conclude with potential next steps.

Related Reports and References

- UW System Academic Program Planning, Review, & Array Management

Related Policies

- Wisconsin Statues § 36.09(1)(a): "Responsibilities of the Board of Regents"
- Regent Policy Document 4-12: "Academic Program Planning, Review, and Approval in the University of Wisconsin System"
- UW System Administrative Policy 102: "Policy on University of Wisconsin System Array Management: Program Planning, Delivery, Review, and Reporting"
- UW System Administrative Procedure 102.A: "New Academic Degree Programs, Changes to Academic Degree Programs, and Additional SYS 102 Items"

Discussion Questions

- How do provosts approach collaboration with other campuses for in-person, online programs, and other academic resources? What are barriers to collaboration?
- Are there current policies or other structural barriers to program array planning, particularly those that the Regents could address?
- What do enrollment professionals hear about academic interests from prospective students? What fields are most interesting to students, and how might a program's availability impact a student enrollment decision?
- What other information, questions, or considerations might Regents want to know about program planning on campus?

ATTACHMENTS

A) Campus program collaboration report

UNIVERSITY OF WISCONSIN SYSTEM

Academic Collaborations

March 2023

UNIVERSITY OF WISCONSIN SYSTEM

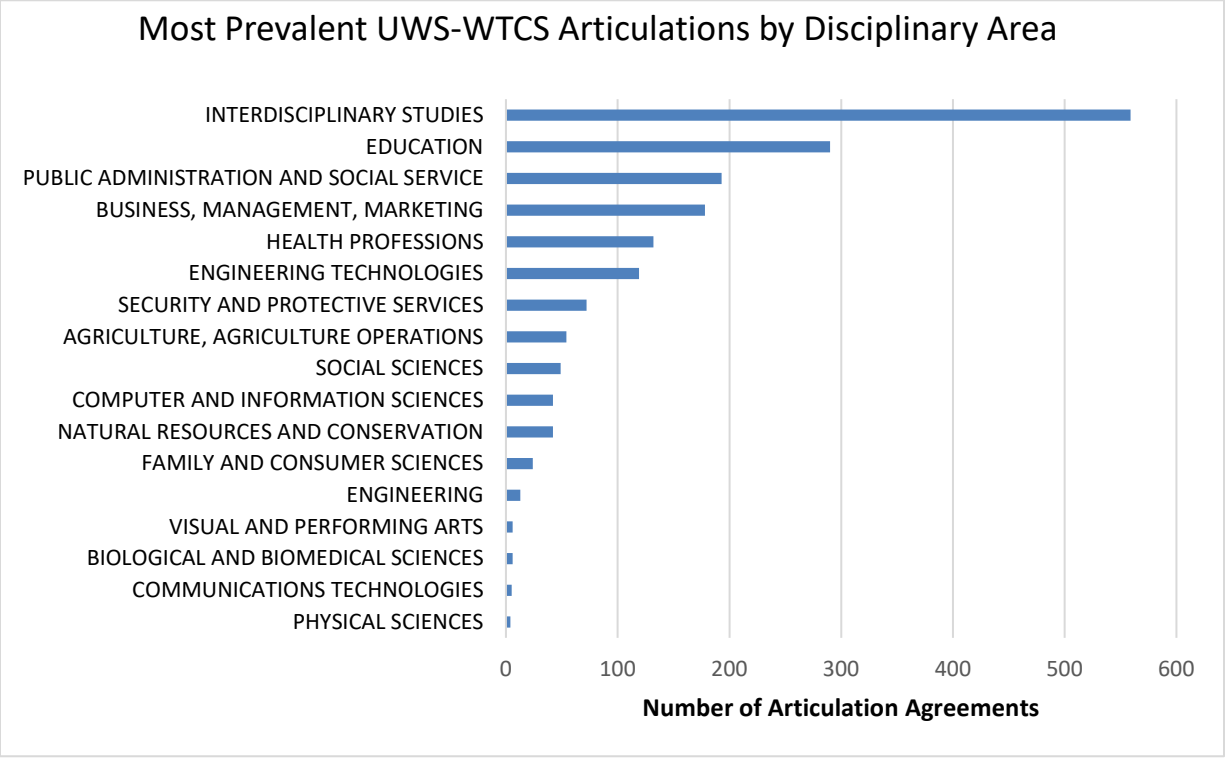
Contents

Academic Collaborations

The following narrative and graphs provide examples of some of the academic collaborations taking place within the UW System and between the UW System and other systems of higher education in the state.

Articulation Agreements

Articulation agreements are arrangements between institutions that agree in advance, via a Memorandum of Understanding (MOU) or other agreement, to accept each other's credits in transfer, often in partial fulfillment of one or more specific credentials. At this time, approximately 1,800 articulation agreements exist between UW System (UWS) campuses and Wisconsin Technical College System (WTCS) institutions (see graph, below).



In addition to articulation agreements with the WTCS campuses, UW System institutions have dozens of inter–UW System transfer agreements and dual degree agreements, particularly in the field of engineering. For example, a 2 + 2 agreement between UW-Whitewater and UW-Platteville allows students to earn an Associate in Science (AS) degree

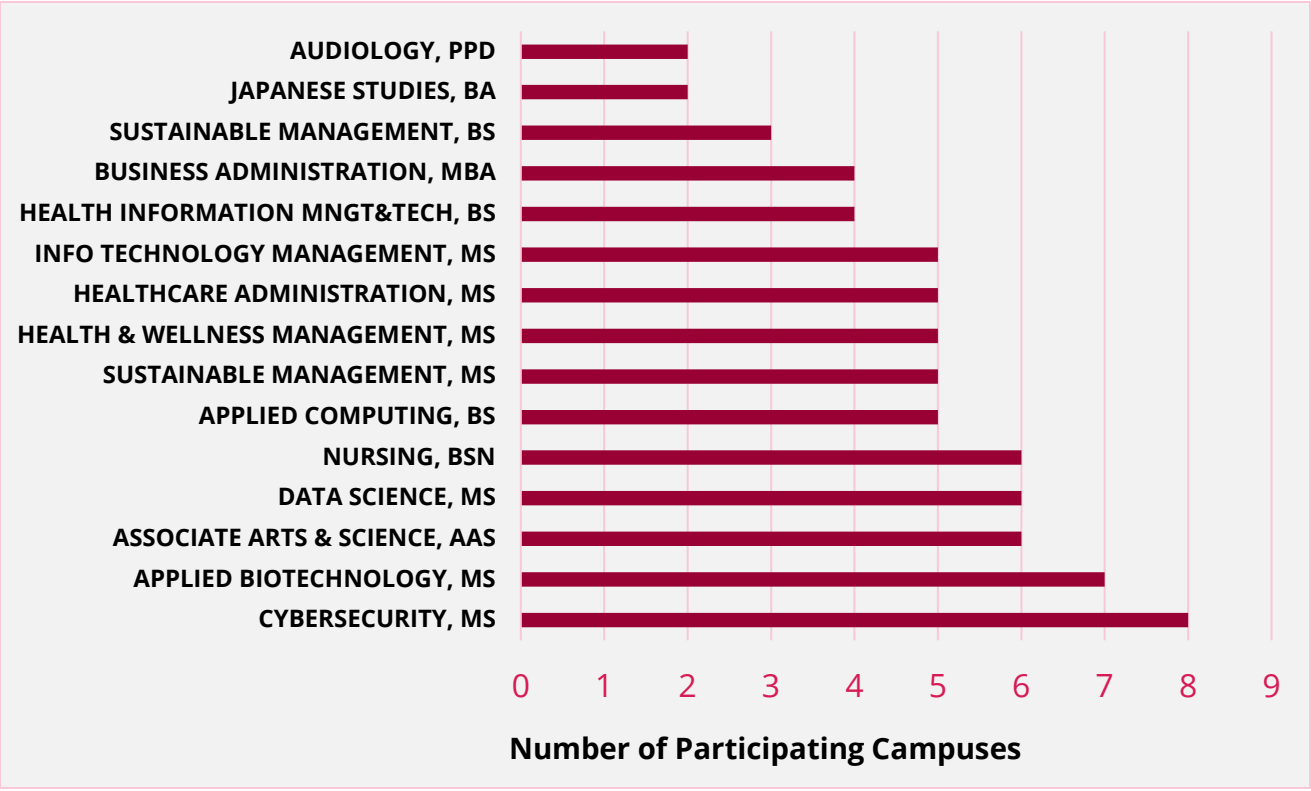
at the UW-Rock County campus and a Bachelor of Science in Engineering at UW-Platteville. UW-Milwaukee, in particular, also supports extensive international agreements, such as the dual master's degree agreement with Shanghai University of Engineering Science.

In addition, multiple UW System campuses are involved in academic collaborations with Wisconsin healthcare industries. For example, UW-Eau Claire maintains nearly two dozen collaborations with organizations such as the Mayo Health System and Aspirus Cancer Center to provide students with required clinical internships in a variety of programs, such as Nuclear Medicine Technology and Nurse Anesthesia. And UW Oshkosh maintains similar agreements whereby regional healthcare organizations such as the Marshfield Clinic provide clinical coursework toward the Medical Imaging degree.

Collaborative Program Delivery

UW System institutions also work collaboratively to deliver program curriculum across the system. In collaboratively delivered programs, faculty and staff from partnering institutions work collectively to develop and approve the program curriculum, and partner institutions are each responsible for delivering different courses in the curriculum. The delivery of many of our collaborative programs is facilitated by administrative support from UW Extended Campus (UWEX). Programs delivered with UWEX administrative support are outlined in the graph below.

UWEX Supported Collaboratively Delivered Programs



Independently Administered Collaborations

In addition to the collaborative programs administered by UWEX, there are collaborative programs independently administered by the campuses, as well as numerous other eclectic academic and research collaborations. A few examples are highlighted below.

Freshwater Collaborative of Wisconsin

The Freshwater Collaborative of Wisconsin applies the power of the 13 UW institutions and the Wisconsin Idea to lead the global community in addressing freshwater challenges. The mission of the Freshwater Collaborative of Wisconsin is to create knowledge to solve freshwater challenges through collaborative research across fields such as natural and applied sciences, engineering, economics, social sciences, arts, humanities and policy; recruit and develop talented professionals across all freshwater disciplines through intentional structuring of curriculum, training and workplace experiences; and improve the well-being of natural ecosystems and all people by applying research and training to engage and serve communities and solve freshwater challenges.

Dairy Innovation Hub

The Dairy Innovation Hub is a collaboration among three campuses - UW-Platteville, UW-River Falls, and UW-Madison – that represents an annual $7.8 million investment by the state of Wisconsin. The funding supports research personnel, farms and labs in areas related to dairy that each span many academic disciplines. The four focus areas include stewarding land and water resources, enriching human health and nutrition, ensuring animal health and welfare, and growing farm businesses and communities.

Collaborative Language Program

The Collaborative Language Program (CLP) provides partnerships among UW System institutions to support foreign language programs throughout the University of Wisconsin System. The CLP is designed to provide instructional and technological support and an administrative infrastructure for participating universities to share instructional resources and thereby offer a greater diversity of language courses.

MBA Consortium

The MBA Consortium is an online degree program collaboratively delivered by UW-Eau Claire, UW-La Crosse, and UW Oshkosh. U.S. News & World Report has ranked the University of Wisconsin MBA Consortium program among the top 10 programs in the nation in its Best Online MBA Programs rankings.

UW System School Library Education Cooperative

The UW System School Library Education Cooperative is a collaboration with the University of Wisconsin campuses at Whitewater, Oshkosh, and Madison. Permanent faculty teach courses to prepare school library information and technology specialists for licensure. The Cooperative offers high-quality instruction, up-to-date content, peer relationships, and

reduced commuting. Students choose a home campus that administers student services and work with faculty from each institution and with other school librarians from across the state. The curriculum includes hybrid distance courses as well as face-to-face weekend courses with professional colleagues at the campuses.

Physician Assistant Program

UW-Platteville is collaborating directly with the UW-Madison School of Medicine and Public Health to offer a full Physician Assistant (PA) program at the UW-Platteville campus to increase the number of PAs who enter primary care practice in the rural and underserved region of southwest Wisconsin.

Dual Degree Programs

Several campuses participate in dual degree programs. UW-Whitewater in partnership with UW-Platteville, UW-Madison, and UW-Milwaukee offer dual degrees in Physics and Engineering.

Collaborative Coursework

- UW-Milwaukee offers Ojibwe Language courses to UW-Superior students to meet requirements of the First Nations Studies minor.
- UW-Eau Claire provides a similar service to all UW institutions by providing instruction in Indigenous Languages and Chinese.
- The UW Business Alliance allows students at UW-Eau Claire, UW-River Falls, and UW-Superior to take business core classes online. Faculty from all three campuses teach in the program.
- UW-River Falls, UW-Stout, and UW-Superior are creating a Memorandum of Understanding (MOU) to offer courses which will lead to a Certificate in Brewing. This program is a response to a regional interest in the brewing sciences.

Minor in Architecture

UW-Platteville students may pursue a minor in Architecture through a partnership with UW-Milwaukee. The architecture minor is offered in collaboration between the UW-Platteville Department of Performing and Visual Arts and with the UW-Milwaukee School of Architecture and Urban Planning (SARUP) and makes use of SARUP online offerings.

Northwest Wisconsin Engineering Consortium

Through a collaboration between UW-Stout, UW-River Falls, and UW-Eau Claire, first-year engineering courses and upper-level electives are made available to students. Students can seamlessly transfer to an Engineering program at a consortium partner.

Platteville Engineering Partnership

This unique model works with numerous partner sites providing a high-quality UW-Platteville engineering education in mechanical, industrial and systems engineering and electrical engineering throughout the state of Wisconsin. Current partners include UW

Oshkosh, UW-Stevens Point, UW-Whitewater, Madison College, Carroll University and Edgewood College. The delivery model provides the opportunity to further expand this program with willing partner institutions to further leverage state resources.

Nursing & Social Work Collaborations

- UW-Platteville collaborates with UW Oshkosh to streamline nursing educational training and further expand access opportunities for a Bachelor of Science in Nursing. This opportunity is focused on increasing the nursing workforce in rural and underserved regions in southwest Wisconsin.
- Through a shared instruction model, UW-Eau Claire and UW-Stevens Point provide coursework for completion of a Bachelor of Science in Nursing conferred by UW-Eau Claire.
- Undergraduate UW-Platteville students may complete a Master of Social Work program at UW-Milwaukee by completing prescribed undergraduate coursework. Time to degree for the master's degree is accomplished in 18 months.

Master of Science in Educational Leadership

UW-Whitewater and UW-Madison have combined resources to provide a distinctive Educational Leadership Co-op program. The program offers courses leading to certification as K-12 Principal, Director of Instruction, or Director of Special Education/Pupil Services. This program is offered at the Whitewater campus; both UW-Whitewater and UW-Madison faculty teach in the program. UW-Madison awards the final certification and master's degree.

Associate to Bachelor's Degree Collaborations

- Students at UW Oshkosh and UW-Whitewater may earn an Associate of Applied Science (AAS) in pre-engineering and a Bachelor of Science (BS) in Electrical or Mechanical Engineering from UW-Platteville.
- Students earning a pre-engineering AAS at UW-Stevens Point are positioned to pursue an engineering BS at UW-Platteville or UW-Stout.
- Completion of an Associate of Science (AS) in Hospitality & Tourism Management from UW-Platteville provides automatic admission to UW-Stout's bachelor's degree in Hotel, Restaurant, and Tourism. UW-Stout faculty assist in delivery of courses in the AS degree at UW-Platteville's branch campus.
- UW Oshkosh has partnered with several of Wisconsin's technical colleges and UW-Green Bay. Students may start their degrees at any one of the 12 Northeast Wisconsin Educational Resource Alliance (NEWERA) campuses and finish their studies in Engineering Technology at UW Oshkosh.

Higher Education Regional Alliance (HERA)

UW institutions formed alliances to support student success. For example, a collaborative of 18 southeastern Wisconsin public and private, two- and four-year colleges and

universities, including UW-Milwaukee, UW-Parkside and UW-Whitewater, and a network of partner organizations dedicated to closing the achievement gap. Their goal is to educate today's students to become an innovative and nimble workforce that meets the needs of the region's industries tomorrow. Initial accomplishments include Asian, Black, and Hispanic students at HERA institutions experiencing a two percent increase in the first-year retention rates and decreased excess credits at graduation by 5.7 credits. HERA also provides employers with short-term micro-credentials in high-need areas of healthcare, STEM, technology and manufacturing, and virtual internships.

Partnerships with UW-Madison's Division of Extension

- UW-Superior provides support to the Lake Superior National Estuarine Research Reserve (NERR), which is now part of the UW-Madison Division of Extension. UW-Superior leases facilities to the NERR, provides snow plowing and grounds services, and contributes financial support to an environmental science course that the NERR instructs.
- UW-Platteville is a partner with the Division of Extension with split appointments in the School of Agriculture providing state-wide expertise in farm business management and nutrient management.

Wisconsin Council on Undergraduate Research

This Council is comprised of research directors from across the UW System. It provides for collaborative relationships and leadership to advance, enhance, and expand undergraduate research and scholarly and creative activities.

Shared Resources

- Several campuses jointly offer services or trainings. Examples include:
    - UW-River Falls and UW-Superior are jointly developing a grant writing academy for this academic year.
    - UW-Eau Claire, UW-River Falls, and UW-Stout jointly offer van training. This opportunity was developed in collaboration with Chippewa Valley Technical College (CVTC) and includes both classroom and behind-the-wheel instruction by trained CVTC personnel.
    - UW-Superior, UW-River Falls, and UW-Stout jointly offer campus training events.
- The Northwest Regional Procurement Center of Excellence is a consortium formed by UW-Eau Claire, UW-Stout, UW-River Falls, and UW-Superior. The consortium's goals are to utilize the combined buying power to obtain the best rates.
- UW-Whitewater serves as a host site for the VoIP phone system used by UW-Platteville, UW-Parkside, UW Oshkosh, UW-Green Bay, UW-Stevens Point, and UW-Superior.
- All campus police rely on mutual aid from sister campuses during large events. System chiefs of police recently began discussing what untapped resources may be available to

support each campus's needs. This may include training on unified tactics, critical incident management, and supporting officer well-being.

- Many UW System campuses are piloting the EAB navigate Academic Planning student success module. This collaboration can result in a reduced cost point and the ability to work through implementation feasibility across system universities.
- All campuses utilize their peers across the System to share ideas and discuss best practices, leverage purchasing power, and seek ways to best utilize resources. For example, through the Council of UW Libraries all UW campuses share resources, make group decisions on purchasing and collections, develop shared practices and hold a conference every spring for all UW institutions.

Other Collaborations

In addition to academic alliances, campuses work with their peer institutions and UW System to streamline processes and share resources to create efficiencies. Examples include the following:

Shared Initiatives

- UW-Milwaukee has partnered with UW-Parkside to join the Education Advisory Board's (EAB*) Moon Shot for Equity* initiative. The goal is to advance college completion rates and eliminate the achievement gap by 2030. UW-Milwaukee has dedicated staff time to help lead this initiative, which involves revamping developmental math and English courses, development of Meta Majors, accessing retention grant programs, and more.
- UW-Milwaukee and UW Oshkosh have worked collaboratively to address Native American Graves Protection and Repatriation Act (NAGPRA) issues. They have shared information and alternate hosting Intertribal Consultation meetings with tribal leaders. The goal is to combine internal expertise in this area.

Administration Transformation Program (ATP)

Campus Administration across all 13 universities are collaborating on efficiency efforts and improvements. Employees across the System are joined in collaborative workgroups on a mission to rebuild finance, human resources, and research administration systems and services at every institution within the University of Wisconsin System. The goal is to reduce the complexity of the current administrative environment and refocus valuable staff time on the UW System's mission of education, research, and outreach.

Shared Positions

Campuses share positions thus economizing while ensuring important functions are adequately provided. For example, UW-Superior and UW-River Falls share a Chief Information Security Officer position as do UW-Whitewater and UW-Platteville.