

**MICHIGAN STATE UNIVERSITY**

**Report of  
THE UNIVERSITY COMMITTEE ON CURRICULUM  
to the Faculty Senate  
April 9, 2024**

*The effective date for new programs subject to Statewide Academic Program review is implemented in accordance with the Statewide Academic Program Review calendar.*

MICHIGAN STATE UNIVERSITY  
University Committee on Curriculum

April 9, 2024

TO: Faculty Senate

This report is prepared and distributed for the following purposes:

1. To report new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses.
2. To notify the initiating colleges, schools, and departments of approval by the University Committee on Curriculum of their requests for new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses.
3. To provide information to members of the faculty in each department about academic programs and courses in all colleges, departments, and schools of the University.

Reports of the University Committee on Curriculum to the Faculty Senate are organized as follows:

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

Organized by colleges in alphabetical order. For a given college, academic units are organized in alphabetical order. For a given academic unit, degrees, majors, and specializations are organized in alphabetical order.

PART II - NEW COURSES:<sup>1</sup>

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

PART III - COURSE CHANGES:<sup>1</sup>

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

Not all of the above categories, and not all of the colleges and academic units, will necessarily appear in any given Senate Report.

<sup>1</sup>One or more of the abbreviations that follow may be included in a course entry:

- P: = Prerequisite monitored in SIS
- C: = Corequisite
- R: = Restriction
- RB: = Recommended background
- SA: = Semester Alias

MICHIGAN STATE UNIVERSITY

April 9, 2024

TO: Faculty Senate  
FROM: University Committee on Curriculum  
SUBJECT: New Academic Programs and Program Changes:  
New Courses and Course Changes

**PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES**

**COLLEGE OF ARTS AND LETTERS**

1. Change the requirements for the **Bachelor of Fine Arts** degree in **Art Education** in the Department of Art, Art History, and Design. The Teacher Education Council (TEC) approved this request at its March 18, 2024 meeting.
  - a. Under the heading **Requirements for the Bachelor of Fine Arts Degree in Art Education** make the following changes:
    - (1) In item 1., replace paragraph two with the following:

The University's Tier II writing requirement for the Art Education major is met by completing Studio Art 411 and 412. Those courses are referenced in item 4. below.
    - (2) In item 3., make the following changes:
      - (a) Change the total credits from '24' to '15'.
      - (b) Delete the following courses:

STA	112	Art and Design: Concepts and Practices	3
STA	340	Ceramics: Hand Building	3
STA	345	Ceramics: Wheel Throwing	3
    - (3) Delete item 3. j.
    - (4) Reletter item 3. f., g., h., and i. to 3. g., h., i., and j.
    - (5) Add the following 3. f.:

One of the following courses (3 credits)

STA	340	Ceramics: Hand Building	3
STA	345	Ceramics: Wheel Throwing	3
    - (6) Replace item 4. with the following:

The following **Professional Education Courses** (37 credits):

CEP	240	Introduction to Exceptional Learners	3
STA	310	Clinical Experience in Visual Arts Education I	4
STA	410	Clinical Experience in Visual Arts Education II	3
STA	411	Seminar in Visual Arts Education I (W)	3
STA	412	Seminar in Visual Arts Education II (W)	3
STA	413	Student Teaching Internship in Visual Arts Education	6
TE	101	Social Foundations of Justice and Equity in Education	3
TE	102	Pedagogy and Politics of Justice and Equity in Education	3
TE	150	Reflections on Learning	3

TE	302	Literacy and Adolescent Learners in School and Community Contexts	3
TE	341	Teaching and Learning of (Bi)Multilingual Learners	3

Effective Fall 2024.

2. Establish a **Minor in Screenwriting** in the Department of English. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 22, 2024 meeting.

a. **Background Information:**

Student demand for courses in screenwriting has been increasing. They have expressed an interest in a structured curriculum and a greater selection of advanced offerings. Some members of the faculty regularly offer independent study courses to meet this interest. To formalize this work, the Film Studies Program introduced FLM 484, an advanced special topics course in screenwriting for AY 23/24. With this course in place, we now have the core set of offerings for a minor in screenwriting.

MSU has a long history of producing successful screenwriters. We have strong student demand in screenwriting due, in part, to this history. Our list of Spartans in Hollywood includes several alumni with an active interest in maintaining ties to the university. A minor in screenwriting would fit as a supplement to the university's existing majors in Film Studies and Digital Storytelling. It would follow the format of our minors in Fiction Filmmaking and Documentary Filmmaking.

The minor will formalize existing strengths in this field and aligns with the College of Arts and Letters and university goals of enhancing the presence of the arts on campus.

b. **Academic Programs Catalog Text:**

The Minor in Screenwriting, which is administered by the Department of English, offers undergraduate students a foundation in the production of scripts for fiction films and television programs.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who are planning careers in writing for film and television should consider combining this minor with a major in Film Studies or Digital Storytelling.

Students who plan to complete the requirements of the minor should consult the undergraduate advisor in the Department of English or the Director of Film Studies in the Department of English.

**Admission**

Students considering the Minor in Screenwriting must have a minimum grade-point average of 2.0.

**Requirements for the Minor in Screenwriting**

			CREDITS	
Complete a minimum of 16 credits from the following:				
1.	One of the following introductory courses in Film Studies (4 credits):			
	FLM	230	Introduction to Film	4
	FLM	260	Introduction to Digital Film and Emergent Media	4
2.	All of the following core courses (9 credits):			
	FLM	334	Introduction to Screenwriting (W)	3
	FLM	434	Advanced Screenwriting (W)	3
	FLM	484	Advanced Topics in Screenwriting	3
3.	At least one of the following courses (3 credits):			
	DS	202	Writing for Digital Storytelling	3
	ENG	227	Introduction to Playwriting	3
	FLM	255	Stars and Directors	3

FLM	300	History of Film to Midcentury	3
FLM	301	History of Film after Midcentury	3
FLM	337	Topics in Film Form	3
FLM	350	National and Transnational Cinemas	3
FLM	355	Studies in Film Genres	3
FLM	380	Classical Film and Media Theory	3
FLM	381	Contemporary Film and Media Theory	3
FLM	400	Seminar in the History of Film (W)	3
FLM	450	Studies in Ethnic Film	3
FLM	451	Studies in Postcolonial Film	3
FLM	452	Studies in Film, Gender, and Sexuality	3
FLM	460	Seminar in Digital Film and Emergent Media (W)	3
FLM	480	Seminar in Film and Media Theory (W)	3
FLM	484	Advanced Topics in Screenwriting (may be repeated with a different topic)	3
FLM	491	Special Topics in Film Studies	3
THR	304	Topics in Acting/Directing II	3
THR	350	Plays as Film	3

Effective Fall 2024.

3. Establish a **Bachelor of Arts** degree in **Nonprofit Leadership, Religion, and Social Change** in the Department of Religious Studies. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 22, 2024 meeting.

a. **Background Information:**

The proposal for a new major in nonprofit leadership, religion, and social change originated from faculty members in the Department of Religious Studies as a natural development of their existing Nonprofit Leadership undergraduate concentration and current catalog of courses. The department also has a new master's and graduate certificate program in Nonprofit Leadership, Global Cultures, and Social Enterprise (GNL). The proposed bachelor's program is unique in relation to current MSU offerings and programs at other educational institutions in combining practical understanding of nonprofits (501c3 organizations), charitable work, and philanthropy with a distinctive emphasis on cultural knowledge in a global religious context. It expands on related course offerings within the College of Arts and Letters, and distinctly adds to current programs outside the College of Arts and Letters, specifically community sustainability courses and MSU's minor in entrepreneurship and innovation. The proposed major provides professional orientation and career specialization along with a sound humanities foundation. It provides students with the skills and knowledge necessary for success in public and nonprofit organizations. To be successful in non-profit organizations that work with people and communities, a knowledge of human religious cultures is essential. Practical skills and knowledge are skills a non-profit professional needs to navigate a global cultural world. By combining practical skills like grant making, grants evaluation, and intercultural competence with the College of Arts and Letters' traditional emphases on global cultures and arts, its course work activates humanistic studies by applying them to international and national nonprofit activities, charitable projects, philanthropic enterprises, NGOs, and civil society. It also includes course work in areas of personal development and well-being for the nonprofit professional, providing a program distinctive not only in Michigan, but also nationally.

At the undergraduate level, there is no other nonprofit major at MSU. MSU's commitment to DEI and ethics initiatives, along with the colleges' focus on a culture of care and providing professional pathways for humanities students. The Department of Religious Studies distinctive capacity to engage with and expand knowledge of nonprofits, philanthropy, charity, and service, as evidenced by its current undergraduate concentration and graduate programs, provides an ideal setting to develop an undergraduate major in nonprofit leadership and global cultural knowledge. Its programs offer students a foundational understanding of religious cultures, societies, and values that situate religion as a part of human culture and support skills in communicating effectively across cultures (intercultural competence). In religious studies, individuals are trained to work with one of the foundations of cultural diversity: religion, both in terms of diverse traditions as well as people's different perspectives on religion in modernity. With no advocacy for a specific stance on religion, the department's goal is to prepare students to recognize how religion operates in the world so that they can successfully formulate and manage projects with diverse colleagues. Such

an approach, when combined with faculty already versed and experienced in the realms of nonprofits, charity, philanthropy, and social entrepreneurship, make the department an ideal home for a distinctive major that combines a humanistic education with a professional pathway for students interested in service and public engagement.

**b. Academic Programs Catalog Text:**

The Bachelor of Arts degree in Nonprofit Leadership, Religion, and Social Change will provide students the opportunity to develop deeper knowledge of national and international nonprofit organizations, NGOs, philanthropic enterprises, charitable actions, and careers in service in the context of global cultural knowledge, religious engagements, and spiritual orientations. There are five areas of primary focus: (1) nonprofit, philanthropic, and charity governance, leadership, and legal structures; (2) NGOs, global civil society, and theories, methods, and examples of social change; (3) values, virtues, ethics, and justice in relation to global cultural and religious knowledge; (4) human, ecological, and societal flourishing in civil society, particularly in contexts that may be labeled as “religious” or “spiritual”; and (5) organizational innovation and leadership theory/practice in global religious and cultural contexts. Practical application, experiential learning, and social engagement are emphasized.

**Requirements for the Bachelor of Arts Degree in Nonprofit Leadership, Religion, and Social Change**

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Nonprofit Leadership, Religion, and Social Change.

The University's Tier II writing requirement for the Nonprofit Leadership, Religion, and Social Change major is met by completing Religious Studies 485 or 490 or 491 or 499. Those courses are referenced in item 3. e. below.

2. The requirements of the College of Arts and Letters for the Bachelor of Arts degree.
3. The following requirements for the major (minimum of 40 credits):

	CREDITS
Foundations of Religious Studies (6 credits)	
a. One of the following courses (3 credits):	
REL 101 Exploring Religion	3
REL 102 Exploring Spirituality	3
REL 150 Exploring Biblical Literature	3
REL 206 Spirituality, Belonging, and the Quest for Purpose	3
REL 301 Methods and Theories in the Study of Religion	3
b. One of the following courses in global religion (3 credits):	
REL 306 Native American Religions	3
REL 308 Black Spirituality and Religion	3
REL 310 Judaism	3
REL 320 Christianity	3
REL 325 East Asian Buddhism	3
REL 330 Islam	3
REL 335 East Asian Religions	3
REL 340 Hinduism	3
REL 350 Buddhism in South Asia	3
REL 355 Southeast Asian Religions	3
REL 360 African Religion	3
REL 365 Evangelicalism in the U.S.	3
REL 414 Jewish Identity (W)	3
REL 420 Birth of Christianity (W)	3
REL 425 Apocalypse Then and Now (W)	3
REL 430 The Qur'an and Its Interpreters (W)	3
REL 432 Modern Muslim Thought (W)	3
REL 441 Devotional Hinduism (W)	3

c.	All of the following nonprofit leadership courses (15 credits):		
	REL 185	Introduction to Religion and Nonprofits	3
	REL 207	Intercultural Competence, Religious Diversity, and Self-awareness	3
	REL 285	Introduction to Social Entrepreneurship and Religion	3
	REL 455	Introduction to Monitoring, Evaluation, and Learning for Nonprofits	3
	REL 485	Religion and Nonprofit Leadership (W)	3
d.	Nine credits from the following religious studies nonprofit courses, At least 3 credits must be at the 300 or 400 level.		
	REL 210	Religion and the Environment	3
	REL 250	Religion and the Arts	3
	REL 305	Spirituality, Peacebuilding, and Social Change	3
	REL 311	International Development and NGO Management	3
	REL 385	Religion, Health, and Healthcare	3
	REL 456	Indigenous Environmental Stewardship, Ontologies, and Governance	3
	REL 457	Indigenous Research Methodologies and Ethics	3
e.	Two of the following nonprofit courses from the following (6 credits):		
	AAAS 300	Communities in Action	3
	AAAS 401	Social Media and New Journalism	3
	ACM 461	Financial Management and Planning of Arts, Cultural, and Museum Management	3
	ACM 462	Marketing and Public Relations in Arts, Cultural, and Museum Management	3
	ACM 465	Leadership and Innovation for Arts, Cultural and Museum Management	3
	ACM 467	Development and Fundraising for Arts, Cultural Management, and Museums	3
	CSUS 322	Leadership for Community Sustainability	3
	CSUS 429	Program Evaluation for Community Sustainability	3
	CSUS 430	Nonprofit Organizational Management for Community Sustainability	3
	CSUS 433	Grant Writing and Fund Development	3
	WRA 260	Writing, Rhetoric, Cultures, and Community	3
	WRA 331	Writing in the Public Interest (W)	3
	WRA 337	Writing and Public Policy	3
	WRA 401	Rhetoric, Leadership, and Innovation	3
	WRA 441	Social Justice as Rhetorical Practice	3
	WRA 453	Grant and Proposal Writing	3
f.	Complete 3 credits of Experiential Learning through one or more of the following experiences:		
		Study Away or Study Abroad	1 to 4
	REL 490	Independent Study (W)	1 to 4
	REL 493	Religious Studies Internship	1 to 4
	REL 499	Senior Thesis or Project (W)	1 to 4

Effective Fall 2024.

**ELI BROAD COLLEGE OF BUSINESS**

1. Change the requirements of the **Master of Science** degree in **Business Data Science and Analytics** in the Eli Broad College of Business. The University Committee on Graduate Studies (UCGS) approved this request at its March 18, 2024 meeting.
  - a. Under the heading **Requirements for the Master of Science Degree in Business Data Science and Analytics** make the following changes:
    - (1) In item 1., delete the following courses:

CSE	881	Data Mining	3
CSE	891	Selected Topics	3
ITM	882	Analytics Practicum	3
ITM	893	Business Analytics Internship	3
ITM	888	Capstone: Business Analytics	3

Add the following courses:

ACC	822	Information Systems Project Management	1
CSE	801A	Introduction to Big Data Analysis	3
CSE	801B	Introduction to Data Mining	3
CSE	891	Selected Topics	1
ITM	843	Career Management	1
ITM	887	Analytics Proseminar	1
ITM	893	Business Analytics Internship	1
ITM	888	Capstone: Business Analytics	1
MKT	829	Digital Marketing	3
    - (2) In item 1., in the note, delete 'ITM 882'.

Effective Fall 2024.

2. Change the requirements for the **Master of Science** degree in **Accounting** in the Department of Accounting and Information Systems. The University Committee on Graduate Studies (UCGS) approved this request at its March 18, 2024 meeting.

*The concentrations in the Master of Science degree in Accounting are noted on the student's academic record when the requirements for the degree have been completed.*

  - a. Under the heading **Requirements for the Master of Science Degree in Accounting**, make the following changes:
    - (1) In item 2., under the **Public and Corporate Accounting** concentration, add the following course:

ACC	845	Environmental, Social and Governance (ESG) Measurement and Disclosure	3
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    - (2) In item 3., add 'transaction services' as an elective area.

Effective Spring 2025.

3. Change the requirements for the **Master of Science** degree in **Accounting and Data Analytics** in the Department of Accounting and Information Systems. The University Committee on Graduate Studies (UCGS) approved this request at its March 18, 2024 meeting.

*The concentrations in the Master of Science degree in Accounting and Data Analytics are noted on the student's academic record when the requirements for the degree have been completed.*

- a. Under the heading **Requirements for the Master of Science Degree in Accounting and Data Analytics**, make the following change:

- (1) In item 2., under the **Managerial Analysis for Decision Making** concentration, Change the title of 'ACC 841' to 'Corporate Sustainability Strategy Development and Implementation'.

Effective Spring 2025.

4. Change the name of the **Graduate Certificate in Accounting for Management Decision Making to Managerial Analysis for Decision Making** in the Department of Accounting and Information Systems. The University Committee on Graduate Studies (UCGS) approved this request at its March 18, 2024 meeting.

No new students are to be admitted to the Graduate Certificate in Accounting for Management Decision Making effective Fall 2024. No students are to be readmitted to the Graduate Certificate in Accounting for Management Decision Making effective Fall 2024. Effective Fall 2026, coding for the Graduate Certificate in Accounting for Management Decision Making will be discontinued and the program will no longer be available in the Department of Accounting and Information Systems. Students admitted to the graduate certificate prior to Fall 2024 will be awarded a Graduate Certificate in Accounting for Management Decision Making in the Department of Accounting and Information Systems. Students admitted to the graduate certificate Fall 2024 and forward will be awarded a Graduate Certificate in Managerial Analysis for Decision Making in the Department of Accounting and Information Systems.

5. Change the requirements for the **Minor in Entrepreneurship and Innovation** in the Department of Management.

- a. Under the heading **Requirements for the Minor in Entrepreneurship and Innovation** make the following changes:

- (1) Replace the introductory text with the following:

Students must complete 15 credits in courses from the following list.  
A 2.0 grade-point average must be maintained in courses completed for the minor. Students must also complete two Entrepreneurship and Innovation Experiences.

- (2) In item 2., delete the following courses:

AL	300	Starting Your Business in the Creative, Visual, and Theatre Arts	2
EAD	361	Educational Reform and Policy Analysis	3
ESHP	231	Venture Launch	3
HRT	407	Horticulture Marketing	3
LB	268	The Business of Medicine	3
PLS	302	Urban Politics	3
TE	201	Current Issues in Education	3
UP	201	Introduction to Urban and Regional Planning	4

Replace the note with the following:

Additional approved Entrepreneurship and Innovation elective courses are available at: <https://entrepreneurship.msu.edu/courses>.

- (3) Replace item 3. with the following:

Completion of two **Entrepreneurship and Innovation Experiences**. Students may complete this requirement by choosing from the options offered on the Burgess Institute for Entrepreneurship and Innovation Web site. See <https://entrepreneurship.msu.edu/academics/experiences>.

Effective Fall 2024.

### **COMMUNICATION ARTS AND SCIENCES**

1. Establish a **Minor in Digital Storytelling** in the School of Journalism. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 22, 2024 meeting.

a. **Background Information:**

In Fall 2021, the School of Journalism in the College of Communication Arts and Sciences launched the bachelor's degree in Digital Storytelling. This new program was the result of a shift of faculty from the Department of Media and Information to the School of Journalism to leverage the expertise of the unified faculty, as well as the resources of WKAR, to benefit students with interests in television, film making, audio production and new media.

In the time since, the School has received regular inquiries from faculty and students across the university seeking opportunities to marry the digital media production skills of the Digital Storytelling program with the subject matter expertise of their core academic programs. Students already apply the production skills they develop throughout the Digital Storytelling curriculum to a wide variety of professional careers after graduation, including film, television, corporate communications, digital advertising, new media and other fields. Employers in these fields typically build teams that include members with a high level of production skills as well as members with deep subject expertise. The new minor in Digital Storytelling would create an opportunity for students in academic programs across the university to marry their subject expertise in areas such as advertising, business, public policy, the sciences, and more to the production skills that are the core of the Digital Storytelling program. Students in the Digital Storytelling major, meanwhile, would benefit from increased opportunities to work in collaborative teams with students from these other academic programs.

As of Fall 2023, there were approximately 25 students who had declared additional majors or second-degree programs in Digital Storytelling, further showing demand for students in various academic programs to add digital media production skills.

Digital Storytelling joined the Journalism bachelor's degree, which has roots to 1910 at the university, in the School of Journalism. The School of Journalism was one of the first journalism programs to be nationally accredited (1949), and one of the very few to be continuously accredited every six years since then by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). ACEJMC assesses programs based on eight core standards: Mission, Governance and Administration; Curriculum and Instruction; Assessment of Learning Outcomes; Diversity and Inclusiveness; Faculty; Student Services; Resources, Facilities and Equipment; and Professional and Public Service. More on these standards can be found at <http://www.acejmc.org/policies-process/accrediting-standards/>.

b. **Academic Programs Catalog Text:**

The Minor in Digital Storytelling, which is administered by the School of Journalism, prepares students for a media-focused world and provides them with the tools and techniques needed for creative, entrepreneurial and analytical processes and production. Students gain the marketable skills necessary to pursue career paths in film, television, corporate communications, digital advertising, new media and other fields that use sound and image to entertain, inform and/or educate.

The minor is available as an elective to students enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to apply to the program should consult the undergraduate advisor in the School of Journalism.

**Requirements for the Minor in Digital Storytelling**

Complete 15 credits from the following:

			CREDITS
1.	Both of the following Core courses (6 credits):		
	CAS 112	Story, Sound and Motion	3
	DS 113	Story, Sound and Motion II	3
2.	Complete 9 credits from the following:		
	DS 202	Writing for Digital Storytelling	3
	DS 211	Documentary Film History and Theory	3
	DS 241	Filmmaking I: Basics of Film Production	3
	DS 242	Multicam Production I	3
	DS 243	Audio Storytelling	3
	DS 311	Introduction to Documentary Filmmaking	3
	DS 341	Filmmaking II: Creating Short Films	3
	DS 342	Multicam Production II	3
	DS 343	Podcasting	3
	DS 344	Sound Design for Storytelling	3
	DS 351	Producing for Cinema and Television	3
	DS 409	Advanced Lighting and Camera Techniques	3
	DS 440	Advanced Video Editing	3
	DS 441	Filmmaking III: Advanced Filmmaking Capstone (W)	3
	DS 442A	Multicam Production for Arts (W)	3
	DS 442B	Multicam Production for Sports (W)	3
	DS 442C	Multicam Production for News (W)	3
	DS 443	Advanced Audio Design (W)	3
	JRN 212	2D Animation Storytelling	3
	JRN 312	Stop Motion Animation Storytelling (W)	3
	JRN 412	Scoring for Moving Pictures	3
	JRN 413	3D Animation Storytelling	3

Effective Fall 2024.

**COLLEGE OF EDUCATION**

1. Change the requirements for the **Master of Science** degree in **Athletic Training** in the Department of Kinesiology. The University Committee on Graduate Studies (UCGS) approved this request at its March 18, 2024 meeting.

- a. Under the heading **Admission** make the following change:

- (1) In item 8. remove the following:  
 First Aid/CPR/AED (3 credits) or current professional rescuers certification card;  
 Medical Terminology (1 credit);

- b. Under the heading **Requirements for the Master of Science Degree in Athletic Training** make the following changes:

- (1) Change the total credits for the degree from '54' to '51'.
- (2) Delete the following course:

KIN	885	Sport Biomechanics	3
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Effective Fall 2024.

2. Change the requirements for the **Bachelor of Arts** degree in **Special Education** in the Department of Counseling, Educational Psychology and Special Education. The Teacher Education Council (TEC) approved this request at its March 18, 2024 meeting.

a. Under the heading **Requirements for the Bachelor of Arts Degree in Special Education**, make the following changes:

(1) In item 2. c., in the **Grade Three through Grade Six** concentration, change item (3) to the following:

All of the following courses (18 credits):

TE	204	Engaging Elementary Learners in Science: Culture and Equity	3
TE	332	Science Curriculum for Upper Elementary Learners (3-6)	3
TE	340	Teaching and Learning Elementary Science (PK-6)	3
TE	343	Teaching and Learning Elementary	3
TE	405	Teaching Language and Literacy to Diverse Learners I (3-6)	3
TE	406	Teaching Mathematics to Diverse Learners II (3-6)	3

(2) In item 2. d., in the **Learning Disabilities Area of Emphasis** concentration, make the following changes:

(a) Change the credits of CEP 405 from '6' to '12'.

(b) Delete item (2).

Effective Fall 2024.

3. Establish a **Master of Science** degree in **Integrated Secondary Science Education** in the Department of Teacher Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 19, 2024 meeting.

a. **Background Information:**

The Master of Science degree in Integrated Secondary Science Education is designed for students who have an undergraduate or graduate degree in a biological science, chemistry, earth science, environmental science, geology, or physics that wish to become state certified in secondary science education. This master's program aims to increase the number of certified secondary science education students coming from MSU to address a nationwide and statewide shortage of science educators. Currently, there are many institutions across the country that offer master's degree programs that also result in state certification. For example, the University of Michigan offers a four semester Master of Arts with secondary certification in many content areas. Although MSU does have methods to certify post-baccalaureate students, it currently accomplishes it through further undergraduate programming that does not result in additional degrees. This program will result in state certification for Integrated Science Secondary Education, as well as a Master's degree from MSU's College of Education (CoE). Through collaboration with MSU's College of Natural Science and the CoE Teacher Preparation Program, we have a strong history of training highly qualified science teachers.

b. **Academic Programs Catalog Text:**

The Master of Science degree in Integrated Secondary Science Education is designed for persons who want a broad background in biology, chemistry, earth and space science, and physics and to understand the interrelationships between these disciplines. This program is designed primarily for people who plan to teach science (life science, chemistry, earth and space science, or physics) in secondary schools.

### Admission

To be admitted into the Master of Science Degree in Integrated Secondary Science Education students must:

1. have a bachelor's degree in biological science, chemistry, earth science, environmental science, geology, or physics;
2. have an undergraduate cumulative grade-point average of 2.50.

### Requirements for the Master of Science Degree in Integrated Secondary Science Education

The program is available under Plan B (without thesis). The student must complete a total of 35 credits distributed as follows:

			CREDITS
1.	All the following courses (11 credits):		
	ISE 801	Laboratory Investigations in Secondary Education	4
	ISE 821	Integrated Science Research and Engineering	3
	ISE 822	Foundational Earth Systems for Secondary Science Education	4
2.	All of the following courses (24 credits):		
	CEP 801	Psychological Development: Learner Differences and Commonalities	3
	ISE 800	Problems in Science or Mathematics for Teachers	3
	TE 820	Power and Pluralism in School Practice	3
	TE 825	Diverse Learners and Learning Subject Matter	3
	TE 846	Accommodating Differences in Literacy Learners	3
	TE 860	Practice and Inquiry in Science Education	3
	TE 861B	Inquiry, Nature of Science, and Science Teaching	3
	TE 894	Laboratory and Field Experiences in Teaching, Curriculum, and Schooling	3
3.	Acquire teaching experience as a graduate teaching assistant for 4 semesters.		

In addition to the requirements below, students will need to complete any necessary courses for state certification of the Integrated Science Secondary Education standards that they have not completed as part of their previous degree course work.

Effective Fall 2024.

## COLLEGE OF ENGINEERING

1. Establish a **Bachelor of Science** degree in **Technology Engineering** in the College of Engineering. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 8, 2024 meeting.

a. **Background Information:**

The Bachelor of Science degree in Technology Engineering program was developed to fulfill the needs of industry workforce demands with an engineering graduate with a diverse skillset. The curriculum of the program offers options to students who may not meet the secondary admission requirements of other engineering programs due to GPA minimums but would be eligible for secondary admission to the Bachelor of Science degree in Technology Engineering. This offers an additional avenue for the retention of students within the College and the University.

The program will seek accreditation by ABET Engineering Accreditation Commission (EAC).

b. **Academic Programs Catalog Text:**

The Bachelor of Science degree in Technology Engineering is an innovative program which prepares students for modern engineering challenges in the multidisciplinary, interconnected world. The degree is designed to develop engineering and technology foundational skills including, but not limited to, embedded electronic systems, computer aided design, product prototyping, data science, project management, and computer programming in Python and C++. Students will

choose a concentration in Mechatronics or Embedded Cybersecurity, to further advance their engineering and technology interests. The program utilizes hands-on, real-world projects to integrate modern technologies with the engineering mindset.

**Requirements for the Bachelor of Science Degree in Technology Engineering**

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 128 credits, including general elective credits, are required for the Bachelor of Science degree in Technology Engineering.

The University's Tier II writing requirement for the Technology Engineering major is met by completing Technology Engineering 480. That course is referenced in item 3. b. below.

Students who are enrolled in the College of Engineering may complete the alternative track to Integrative Studies in Biological and Physical Sciences that is described in item 1. under the heading **Graduation Requirements for All Majors** in the College statement. Certain courses referenced in requirement 3. below may be used to satisfy the alternative track.

2. The requirements of the College of Engineering for the Bachelor of Science degree.

The credits earned in certain courses referenced in requirement 3. below may be counted toward College requirements as appropriate.

3. The following requirements for the major:

									CREDITS
a.	All of the following courses (29 credits):								
	CEM	161	General Chemistry Laboratory I						1
	CSE	232	Introduction to Programming II						4
	ECE	230	Digital Logic Fundamentals						3
	ME	280	Graphic Communications						2
	MGT	325	Management Skills and Processes						3
	Or								
	SCM	304	Survey of Supply Chain Management						3
	MSE	250	Materials Science and Engineering						3
	PHY	251	Introductory Physics Laboratory I						1
	Or								
	PHY	191	Physics Laboratory for Scientists I						1
	PHY	252	Introductory Physics Laboratory II						1
	STT	180	Introduction to Data Science						4
	STT	201	Statistical Methods						4
	A basic math or science elective from a define course pool								
									3
b.	All of the following courses (25 credits):								
	TNG	210	Manufacturing Processes and Prototyping						2
	TNG	220	Electrical Circuits						4
	TNG	310	Advanced Graphics Communications						3
	TNG	320	Sensors and Signal Processing						3
	TNG	322	Electronics and Embedded Systems Lab						1
	TNG	330	Quality and Continuous Improvement						3
	TNG	335	Computer Security Fundamentals						3
	TNG	430	Engineering Project Management						3
	TNG	480	Technology Engineering Capstone (W)						3
c.	One of the following concentrations (16 credits):								
	<b>Mechatronics</b>								
	TNG	340	Engineering Statics and Mechanics of Materials						3
	TNG	345	Mechanical Machine Dynamics						3
	TNG	440	Robotics, Automation, and Controls						3
	TNG	445	Troubleshooting Mechatronic Systems						4
	TNG	447	Topics in Mechatronics						3

***Embedded Cybersecurity***

TNG	350	Operating System Fundamentals	3
TNG	355	Networks and Network Security	3
TNG	450	Hardware Cybersecurity	3
TNG	455	Engineering Secure Hardware and Software	4
TNG	457	Topics in Embedded Cybersecurity	3

The concentration will be noted on the student's academic record.

Effective Fall 2024.

2. Change the **Admission to the College** statement in the **College of Engineering**. The University Committee on Undergraduate Education (UCUE) approved this request at its February 8, 2022 meeting.

- a. Under the heading **Admission to the College**, add the following new paragraph five:

Minimum criteria for admission to the Technology Engineering program:

1. Completion of at least 28 credits earned after matriculation to Michigan State University.
2. Completion of Mathematics 116 and 132 with a minimum grade of 2.0 in each course.
3. A minimum grade-point average of 2.0 in all mathematics courses.
4. Completion of Chemistry 141 or 151 or approved substitution or waiver.
5. Completion of Physics 183 or 231.
6. Completion of Engineering 102 or Computer Science 231.
7. Completion of Engineering 100.

Effective Fall 2024.

3. Change the **Graduation Requirements for All Majors** in the College of Engineering. The University Committee on Undergraduate Education (UCUE) approved this request at its February 8, 2024 meeting.

- a. Under the heading **Graduation Requirements for All Majors** make the following changes:

- (1) Add the following to item 1. b.:

Technology Engineering majors may use Physics 231 or 232.

- (2) Add the following to item 1. c.:

Technology Engineering majors may use Physics 251.

- (3) Change the first sentence of item 2. to the following:

The requirements of the College of Engineering for the Bachelor of Science degree in all majors other than Technology Engineering that are listed below:

- (4) Change item 2. a. to the following:

Mathematics 132, 133, 234, and 235. Computational Data Science and Computer Science majors are not required to complete Mathematics 235.

- (5) Add the following item 3.:
3. The requirements of the College of Engineering for the Bachelor of Science degree in Technology Engineering that are listed below:
    - a. Mathematics 116 and 132.
    - b. Chemistry 141 or 151.
    - c. Physics 183 or 183B or 231 and 184 or 184B or 232.
    - d. Engineering 100.
    - e. Engineering 102.
    - f. Computer Science and Engineering 231.

Effective Fall 2024.

4. Change the requirements in the **Bachelor of Science** degree in **Mechanical Engineering** in the Department of Mechanical Engineering.

*The concentrations in the Bachelor of Science degree in Mechanical Engineering are noted on the student's academic record when the requirements for the degree have been completed.*

- a. Under the heading **Requirements for the Bachelor of Science Degree in Mechanical Engineering** make the following changes:

- (1) In item 3. b. delete the following courses:

ME	332	Fluid Mechanics	4
ME	451	Control Systems	4

Add the following courses:

ME	333	Fluid Mechanics	3
ME	333L	Fluid Mechanics Laboratory	1
ME	452	Control Systems	3
ME	452L	Vibrations and Controls Laboratory	1

- (2) Under the heading **Computational Design** concentration replace the requirements with the following:

To earn a Bachelor of Science degree in Mechanical Engineering with a computational design concentration, students must the requirements for the B.S. degree, including the following:

All of the following courses (9 credits):

ME	416	Computer Assisted Design of Thermal Systems	3
ME	433	Introduction to Computational Fluid Dynamics	3
ME	475	Computer Aided Design of Structures	3

One of the following courses (3 credits):

ME	417	Design of Alternative Energy Systems	3
ME	445	Automotive Powertrain Design	3
ME	456	Mechatronic System Design	3
ME	465	Computer Aided Optimal Design	3

- (3) Delete the **Concentration in Global Engineering**.

*Students currently enrolled in the major have until US28 to complete the requirements for this concentration and have it noted on the student's academic record.*

Effective Fall 2024.

**JAMES MADISON COLLEGE**

1. Change the requirements of the **Minor in Muslim Studies** in James Madison College.
  - a. Under the heading **Requirements for the Minor in Muslim Studies** make the following changes:
    - (1) In item 2., under **Integrative Studies in the Arts and Humanities** add the following course:

IAH	211C	Area Studies and Multicultural Civilizations: The Americas (D)	4
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    - (2) In item 2., under **Religious Studies** add the following courses:

REL	205	Myth, Self and Religion	3
REL	232	Islam in America	3
    - (3) In item 2., under **Anthropology** add the following courses:

ANP	417	Introduction to Islam in Africa	3
ANP	426	Urban Anthropology	3
    - (4) In item 2., under **Geography** add the following course:

GEO	340	Geography of Eurasia	3
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    - (5) In item 2., under **Political Science** add the following courses:

PLS	345	Religion and World Politics	3
PLS	346	Middle East Politics	3
    - (6) Replace the text following the minor requirements with the following:

The following courses do not always contain content relevant to the Minor in Muslim Studies. Before enrolling in any of these, please consult the Muslim Studies Minor coordinator to see if, in the semester in which a student wishes to enroll, the course counts toward the minor: Anthropology 491; French 415, 416, and 447; History 201, 450, 451, and 487; Integrative Studies in Arts and Humanities 211B, 211C, and 211D; Integrative Studies in Social, Behavioral and Economic Sciences 315 and 330B; Geography 340; James Madison College 320, 325, 390, 391, 492, and 497; Political Science 344, 345, 346, 351, and 358; Religious Studies 205 and 232.

Effective Fall 2024.

**LYMAN BRIGGS COLLEGE**

1. Request to recognize the **Integrated Science-Secondary Education** major leading to the Bachelor of Science degree in the College of Natural Science as a **Coordinate Major in Lyman Briggs College**.

Effective Fall 2024.

## **PART II - NEW COURSES**

### **DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS**

- ACC 845 Environmental, Social and Governance (ESG) Measurement and Disclosure  
Spring of every year. 3(3-0) R: Open to master's students in the Accounting Major. Approval of department.
- Stakeholder vs shareholder theory and the elements of useful disclosures and quality non-financial metrics. Coverage of domestic and international reporting requirements, carbon accounting, renewable energy credits, carbon offsets, and the current state of domestic and international privacy and data security regulations. Investigation into the challenges of developing relevant environmental equity and social justice performance metrics. Course content provides a foundation to pursue ESG-related certifications.  
Effective Spring Semester 2025

### **DEPARTMENT OF ART, ART HISTORY, AND DESIGN**

- STA 310 Clinical Experience in Visual Arts Education I  
Spring of every year. 4(1-6) P: TE 102 and TE 150 R: Not open to freshmen or sophomores.  
Directed and evaluated clinical experience placement in the Saturday Morning Art program.  
Forming respectful relationships with students in the SmART classrooms and learning spaces.  
Using assessment techniques to understand learner needs. Adapting curriculum and instruction to diverse learners. Exploration of common teaching dilemmas.  
Effective Fall Semester 2024
- STA 410 Clinical Experience in Visual Arts Education II  
Fall of every year. 3(0-6) P: STA 310 R: Not open to freshmen or sophomores. C: STA 411 concurrently  
Directed and evaluated placement in an elementary and/or secondary Visual Arts classroom.  
Forming respectful relationships with students. Refinement of diverse instructional strategies.  
Co-teaching worthwhile content to students with varied learning needs. Exploration of common teaching dilemmas.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Fall Semester 2024
- STA 411 Seminar in Visual Arts Education I (W)  
Fall of every year. 3(3-0) P: STA 310 and Completion of Tier I writing requirement. R: Not open to freshmen or sophomores. C: STA 410 concurrently  
Examining teaching as enabling diverse learners to create understanding, meaning, and purpose by engagement with the Visual Art curriculum at the elementary and secondary level (PreK-12).  
Review of Visual Arts curriculum. Methods for lesson and unit planning. Adapting the Visual Arts curriculum to learner diversity.  
Effective Fall Semester 2024
- STA 412 Seminar in Visual Arts Education II (W)  
Spring of every year. 3(3-0) P: STA 410 and STA 411 and Completion of Tier I writing requirement. R: Not open to freshmen or sophomores. C: STA 413 concurrently  
Reflection on classroom teaching practice. Formation of professional learning communities devoted to collecting, analyzing, and interpreting data on Visual Arts teaching and learning.  
Dilemmas surrounding Visual Arts teaching practice.  
Effective Fall Semester 2024
- STA 413 Student Teaching Internship in Visual Arts Education  
Spring of every year. 6(0-25) P: STA 410 and STA 411 R: Not open to freshmen or sophomores. C: STA 412 concurrently  
Directed and evaluated internship in an elementary and/or secondary Visual Arts classroom.  
Increased emphasis on independent teaching. Maintaining classroom communities that ensure equitable access to important knowledge and skills. Assessing academic and social outcomes.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Fall Semester 2024

**COLLEGE OF ENGINEERING**

- TNG 210      Manufacturing Processes and Prototyping  
Fall of every year. Spring of every year. 2(0-4) P: EGR 100 and (ME 280 or concurrently) R: Open to students in the Technology Engineering major.  
Large and small scale conventional and additive manufacturing processes as well as electronics and chip manufacturing. Laboratory provides hands-on experiences with machine shop tools selection, use, and safe operation.  
Effective Fall Semester 2024
- TNG 220      Electrical Circuits  
Fall of every year. Spring of every year. 4(3-2) P: PHY 232 and PHY 252 and MTH 132 R: Open to students in the Technology Engineering major. Not open to students with credit in ECE 201.  
Applications and theory of circuits and circuit design including common standard electrical components. Laboratory provides hands-on study of both AC and DC circuits.  
Effective Fall Semester 2024
- TNG 310      Advanced Graphic Communications  
Fall of every year. Spring of every year. 3(1-4) P: TNG 210 and ME 280 R: Open to students in the Technology Engineering major. Not open to students with credit in ME 385.  
Continuation of graphic communications including electrical schematics, geometric design and tolerancing, electrical and mechanical system design, and the integration of computer aided design, computer aided manufacturing, and computer numerical control.  
Effective Fall Semester 2024
- TNG 320      Sensors and Signal Processing  
Fall of every year. Spring of every year. 3(2-2) P: TNG 220 and STT 180 R: Open to students in the Technology Engineering major. Not open to students with credit in ECE 366.  
Conceptualizing of real-world phenomena in terms of electrical output and the implementation of devices for transduction and measurement.  
Effective Fall Semester 2024
- TNG 322      Electronics and Embedded Systems Lab  
Fall of every year. Spring of every year. 1(0-2) P: ECE 230 and TNG 320 R: Open to students in the Technology Engineering major.  
Basic communication protocols utilized between device components and between device and host.  
Effective Fall Semester 2024
- TNG 330      Quality and Continuous Improvement  
Fall of every year. Spring of every year. 3(3-0) P: STT 201 and TNG 310 R: Open to students in the Technology Engineering major.  
Methods of quality control and improvement that are used in the manufacturing and service industries.  
Effective Fall Semester 2024
- TNG 335      Computer Security Fundamentals  
Fall of every year. Spring of every year. 3(3-0) P: CSE 231 R: Open to students in the Technology Engineering major.  
Topics in computer security are explored including data security, system security, and societal, ethical implications.  
Effective Fall Semester 2024
- TNG 340      Engineering Statics and Mechanics of Materials  
Fall of every year. 3(2-2) P: {(MTH 132) and PHY 231} or PHY 183 R: Open to students in the Technology Engineering major. Not open to students with credit in CE 221 or ME 222.  
Force systems, resultants, equilibrium, trusses, frames, beams, and shear-moments in beams and concepts of stress, strain, and deformation resulting from the various applied load configurations.  
Effective Fall Semester 2024

- TNG 345      Mechanical Machine Dynamics  
Spring of every year. 3(2-2) P: TNG 340 R: Open to students in the Technology Engineering major. Not open to students with credit in ME 361.  
Analysis and application of the kinematics and kinetics of mechanical machines and systems.  
Effective Fall Semester 2024
- TNG 350      Operating System Fundamentals  
Fall of every year. 3(2-2) P: CSE 232 R: Open to students in the Technology Engineering major.  
Foundational concepts underpinning modern operating systems. Topics include memory management, process management and prioritization, and input/output abstractions (files, sockets, etc). Emphasis is placed on both theoretical understanding and practical application.  
Effective Fall Semester 2024
- TNG 355      Networks and Network Security  
Spring of every year. 3(2-2) P: CSE 232 R: Open to students in the Technology Engineering major.  
Networking principles with an emphasis on IP and communication protocols. Understanding of the layered architecture of networks and the functions of each layer. Focus on security will show common network attack vectors and how technologies defend against such attacks.  
Effective Fall Semester 2024
- TNG 430      Engineering Project Management  
Fall of every year. Spring of every year. 3(3-0) P: TNG 330 or concurrently R: Open to students in the Technology Engineering major.  
Managing an engineering project, including scope, schedule, budget, and communications. How design considerations such as public health and safety, engineering standards, customer diversity, and ethical responsibilities affect the project outcome. Engineering economics.  
Effective Fall Semester 2024
- TNG 440      Robotics, Automation, and Controls  
Fall of every year. 3(2-2) P: TNG 320 and (TNG 322 or concurrently) and TNG 345 R: Open to students in the Technology Engineering major.  
Hardware, software, sensors, and human resources required to implement effective control systems. Interfacing and controlling a variety of electromechanical devices such as motors and pneumatic actuators. Industrial safety practices and procedures.  
Effective Fall Semester 2024
- TNG 445      Troubleshooting Mechatronic Systems  
Spring of every year. 4(2-4) P: TNG 440 R: Open to students in the Technology Engineering major.  
Concepts, devices, and common practices associated with modern industrial control systems. Emphasis is on testing the output performance of the control system and troubleshooting techniques to address common issues.  
Effective Fall Semester 2024
- TNG 447      Topics in Mechatronics  
Fall of every year. 3(3-0) P: TNG 440 or concurrently  
Current topics in mechatronics through case studies, product analysis, and exploration of state-of-the-art industry applications.  
Effective Fall Semester 2024
- TNG 450      Hardware Cybersecurity  
Fall of every year. 3(2-2) P: TNG 322 and TNG 350 R: Open to students in the Technology Engineering major.  
Reverse engineering process and how to methodically learn about a system from the ground up. Techniques for observing system components, measuring internal traces, and dumping important system resources and defense techniques.  
Effective Fall Semester 2024

- TNG 455      Engineering Secure Hardware and Software  
Spring of every year. 4(2-4) P: TNG 355 and TNG 450  
Projects, centered on the design of a resilient system, defining the attack surface area, and fortifying against potential attacks. Forensic analyses of hardware and software systems.  
Effective Fall Semester 2024
- TNG 457      Topics in Embedded Cybersecurity  
Fall of every year. 3(3-0) P: TNG 450 or concurrently  
Current topics in embedded cybersecurity through case studies, product analysis, and exploration of state-of-the-art industry applications.  
Effective Fall Semester 2024
- TNG 480      Technology Engineering Capstone (W)  
Fall of every year. Spring of every year. 3(1-4) P: TNG 430 and Completion of Tier I writing requirement. R: Open to students in the Technology Engineering major.  
Planning and execution of a team project involving the development of an engineered product or system, utilizing knowledge and skills acquired in prior engineering coursework. Project considerations include engineering standards, system constraints, design for customer needs, ethical issues, budget, timing, and safety.  
Effective Fall Semester 2024

### **DEPARTMENT OF HISTORY**

- HST 374      South Asia before Colonialism  
Fall of every year. 3(3-0)  
Developments between 3000BCE and 1750CE in the areas which now comprise India, Pakistan, and Bangladesh.  
Effective Fall Semester 2024
- HST 375      Modern South Asia  
Spring of every year. 3(3-0)  
South Asia from colonialism to independence and after. Focus on the diverse histories and struggles of marginalized groups and the similarities and differences among the experiences of people in India, Pakistan, Bangladesh, Sri Lanka, Nepal and other South Asian countries.  
Effective Fall Semester 2024
- HST 384      Modern Mexico  
Fall of every year. 3(3-0)
- REINSTATEMENT      Political, economic, and social history, including United States-Mexican relations.  
Effective Fall Semester 2024

### **COLLEGE OF LAW**

- LAW 573A      State Constitutional Law  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.  
Constitutions of all fifty states, focusing on important state constitutional legal principles. Reading and interpreting state constitutional texts.  
Effective Fall Semester 2024

### **DEPARTMENT OF LINGUISTICS, LANGUAGES, AND CULTURES**

- ARB 291      Special Topics in Arabic Studies  
On Demand. 1 to 5 credits. A student may earn a maximum of 10 credits in all enrollments for this course. RB: Recommended background varies by topic and language of instruction.  
Topics in Arabic Studies. Topics vary. Course may be taught in Arabic or English, according to topic.  
Effective Fall Semester 2024

**DEPARTMENT OF MECHANICAL ENGINEERING**

- ME 333 Fluid Mechanics  
Fall of every year. Spring of every year. 3(3-0) P: (ME 361) and (CHE 321 or ME 201) and ((ME 391 or concurrently) and completion of Tier I writing requirement) R: Open to juniors or seniors in the Mechanical Engineering Major. Not open to students with credit in ME 332. C: ME 333L concurrently  
Statics, control volume equations, similitude, and exact fluid solutions. Turbulence, pipe flow, boundary layer flow, compressible flow, and Navier-Stokes equations.  
Effective Fall Semester 2024
- ME 333L Fluid Mechanics Laboratory  
Fall of every year. Spring of every year. 1(0-3) R: Open to juniors or seniors in the Mechanical Engineering Major. C: ME 333 concurrently  
Practices and measurement techniques for fluid mechanics including; measurement uncertainty, flow visualization, pressure, streamlines, conservation, laminar flow, and turbulent flow.  
Effective Fall Semester 2024
- ME 452 Control Systems  
Fall of every year. Spring of every year. 3(3-0) P: ME 461 and ECE 345 R: Open to juniors or seniors in the Mechanical Engineering Major. Not open to students with credit in ME 451. C: ME 452L concurrently  
Mathematical modeling of dynamic systems. Standard feedback control formulation. Transient and sinusoidal steady state analysis. Time and frequency domain controller synthesis.  
Effective Fall Semester 2024
- ME 452L Vibrations and Controls Laboratory  
Fall of every year. Spring of every year. 1(0-3) R: Open to juniors or seniors in the Mechanical Engineering Major. Not open to students with credit in ME 451. C: ME 452 concurrently  
Modeling, measuring, and analysis of oscillatory phenomena found in linear discrete and continuous mechanical systems. Mathematical modeling of dynamic systems. Standard feedback control formulation. Transient and sinusoidal steady state analysis. Time and frequency domain controller synthesis.  
Effective Fall Semester 2024

**COLLEGE OF NATURAL SCIENCE**

- ISE 801 Laboratory Investigations in Secondary Education  
Fall of every year. 4(1-6) R: Open to master's students in the College of Natural Science or in the Center for Integrative Studies in General Science. Approval of department.  
Exploration of the 3-dimensions of next generation science standards through laboratory investigations.  
Effective Fall Semester 2024
- ISE 821 Integrated Science Research and Engineering  
Spring of every year. 3(2-2) R: Open to master's students in the College of Natural Science or in the Center for Integrative Studies in General Science. Approval of department.  
Exploration of the NGSS Science and Engineering Practices through novel research and engineering design projects.  
Effective Spring Semester 2025
- ISE 822 Foundational Earth Systems for Secondary Science Education  
Spring of every year. 4(3-2) R: Open to master's students in the College of Natural Science or in the Center for Integrative Studies in General Science. Approval of department.  
Laboratory based exploration and implementation of 3D learning related to natural, physical, and chemical processes in the Universe, the planets and the Earth.  
Effective Spring Semester 2025

**DEPARTMENT OF RELIGIOUS STUDIES**

- REL 207 Intercultural Competence, Religious Diversity, and Self-awareness  
Fall of odd years. Spring of even years. 3(3-0)  
Enhance understandings of different global cultural systems, spiritualities, and community formations that could be called religious through meaningful and structured interactions to develop intercultural competence and interpersonal skills to engage others inclusively and respectfully, improve intercultural communication, and cultivate habits of self-reflection and self-awareness by exploring diversity.  
Effective Fall Semester 2024
- REL 305 Spirituality, Peacebuilding, and Social Change  
On Demand. 3(3-0)  
Exploration of the complex connection between religion, violence, and conflict resolution with a particular focus on global examples of spiritually inspired social movements, nonprofits, charities, philanthropies, and NGOs engaged in peacebuilding and social change connected to diversity, equity, and inclusivity.  
Effective Fall Semester 2024
- REL 311 International Development and NGO Management  
On Demand. 3(3-0)  
International NGO management tools and approaches in relation to religious studies methodologies, human resource and financial management systems with an emphasis on intercultural competence. Explore funding strategies, ways to measure impact and engagement with key stakeholders during project implementation through the study of diversity.  
Effective Fall Semester 2024
- REL 455 Introduction to Monitoring, Evaluation, and Learning for Nonprofits  
On Demand. 3(3-0)  
Understand concepts, theories, and tools for monitoring, evaluation, and learning in nonprofit settings by positioning the importance of cultural and religious identities, learning strategies and techniques for designing and implementing monitoring and evaluation plans, unpacking fundamentals of project learning tools and ethical guidelines for data collection and reporting with a focus on developing intercultural competence, and linking adaptive management strategies and strategic planning with Monitoring, Evaluation, and Learning.  
Effective Fall Semester 2024
- REL 456 Indigenous Environmental Stewardship, Ontologies, and Governance  
On Demand. 3(3-0)  
Intergenerational survey of Indigenous nations' and citizens' relationships with their local environments, with a specific focus on their respective worldviews, understandings of obligations to other-than-humans (e.g., plants and animals), and approaches towards stewardship (of waterways and lands). Focusing largely on Potawatomi, Ojibwe, and Ottawa ecological knowledge, stories, teachings, spiritualities, and approaches for environmental governance.  
Effective Fall Semester 2024
- REL 457 Indigenous Research Methodologies and Ethics  
On Demand. 3(3-0)  
Exploring a variety of research methodologies from specific Native communities around the world, this course presents core concepts in critical Indigenous studies and demonstrates how to implement ethical practices into any research design or collaborative partnership model, particularly in nonprofit settings.  
Effective Fall Semester 2024

**DEPARTMENT OF TEACHER EDUCATION**

TE 438

Teaching High School Psychology

Fall of every year. 3(3-0) P: PSY 101 and PSY 235 and PSY 238 R: Not open to freshmen or sophomores and open to students in the Secondary Teacher Certification Program (Admitted). Not open to students with credit in TE 409.

Examining teaching as enabling diverse learners to create understanding, meaning, and purpose by engagement with the high school psychology curriculum. Review curricular frameworks and debates within the field. Methods for lesson and unit planning. Adapting the psychology curriculum to learner diversity.

Effective Fall Semester 2024

## **PART III – COURSE CHANGES**

### **DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS**

- ACC 841 ~~The Role of Accounting in Strategy Implementation~~ Corporate Sustainability Strategy Development and Implementation  
Spring of every year. 1 to 3 credits. P: (MBA 812 or ACC 341) and (MGT 409 or (MBA 850 or concurrently)) R: Open to master's students in the Accounting Major or approval of department.  
~~Strategic management control systems and accounting data supporting the design, implementation, monitoring, and continuous assessment of business strategies. Emerging risks and opportunities are also evaluated. Case-based exploration of the role of accounting in the development and implementation of corporate sustainability strategies.~~  
Effective Spring Semester 2025

### **DEPARTMENT OF ART, ART HISTORY, AND DESIGN**

- STA 371 Art, Education and Society  
Spring of every year. 3(3-0) P: {HA 101 and HA 102} and Completion of Tier I Writing Requirement  
Visual theory, learning theory, and social theory in historical and cultural contexts.  
Fieldwork and research-based written assignments.  
DELETE COURSE  
Effective Fall Semester 2024
- STA 481 Art Experiences with Children and Youth I (W)  
Fall of every year. 5(1-8) P: (STA 371) and completion of Tier I writing requirement R: Open to juniors or seniors in the Department of Art and Art History.  
Art teaching in the Saturday Art Program. Emphasis on elementary experiences. Planning and writing art curriculum.  
DELETE COURSE  
Effective Fall Semester 2024
- STA 482 Art Experiences with Children and Youth II (W)  
Spring of every year. 5(1-8) P: (STA 371) and completion of Tier I writing requirement R: Open to juniors or seniors in the Department of Art and Art History.  
Art teaching in the Saturday Art Program. Emphasis on secondary experiences. Planning and writing art curriculum.  
DELETE COURSE  
Effective Fall Semester 2024

### **ELI BROAD COLLEGE OF BUSINESS**

- ESHP 170 ~~Startup: Business Model Development~~ Business Model Design and Prototyping  
~~Fall of every year. Spring of every year. Summer of every year. Fall of every year. Spring of every year.~~ 3(3-0)  
Moving new concepts from idea to prototype in support of developing market value.  
SA: BUS 170  
Effective Spring Semester 2025
- ESHP 190 ~~The Art of Starting~~ Introduction to Entrepreneurship  
~~Spring of every year.~~ Fall of every year. Spring of every year. 3(3-0)  
Aspects of the entrepreneurial experience. The entrepreneurial mindset and the venture creation process. Foundation for getting a venture started, and understanding of what it takes to be an entrepreneur.  
SA: BUS 190  
Effective Spring Semester 2025

- ESHP 230 The Entrepreneurial Mindset  
~~Summer of every year.~~ Fall of every year. Spring of every year. ~~3(2-0)~~ 3(3-0) P: ESHP 190  
Components of entrepreneurship mindset. Steps in venture creation and idea generation.  
Methods for opportunity analysis and voice of consumer.  
SA: BUS 230, MKT 230  
Effective Fall Semester 2024
- ESHP 231 Venture Launch  
Fall of every year. Summer of every year. 3(2-0) P: ESHP 230 or approval of department  
Creating a minimum viable product. Market testing. Building a basic business model.  
Developing and executing a launch plan.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 1 semester  
after the end of the semester of enrollment.  
SA: MKT 231, BUS 231  
DELETE COURSE  
Effective Fall Semester 2024
- ESHP 480 ~~Entrepreneurship Capstone Experience~~ Innovation in Action  
~~Fall of every year.~~ Spring of every year. 3(3-0) ~~P: ESHP 190 or MGT 352 or CAS 114 or approval~~  
~~of department P: ESHP 190 or CAS 114 or approval of department~~ R: Open to students in the  
Entrepreneurship and Innovation Minor.  
~~Entrepreneurship and business development projects. Defining marketing intangibles. Defining~~  
~~scope of work. Engagement management. Preparing deliverables for entrepreneurial firms.~~  
~~Working with entrepreneurs to solve real problems ranging from initial visioning and planning to~~  
~~grow to size.~~ Entrepreneurship and innovation development projects. Defining scope of work  
and preparing deliverables for entrepreneurial and innovation initiatives. Working with  
innovators to solve real world problems. Application required.  
SA: MSC 480, MKT 480 SA: MKT 480, MSC 480  
Effective Spring Semester 2025

### DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION

- CEP 349 Behavior Management in Special Education  
Spring of every year. 3(3-1) ~~P: CEP 240~~ P: CEP 240 and CEP 339 and CEP 351 R: Open to  
undergraduate students in the Special Education-Learning Disabilities Major.  
Management practices for behavior problems and disorders. Applied behavior analysis,  
social skills acquisition through cooperative learning and cooperative discipline. Focus on  
problem-solving and peer collaboration.  
SA: CEP 449  
Effective Fall Semester 2024
- CEP 405 Internship in Teaching Special Education  
Fall of every year. Spring of every year. 6(2-24) A student may earn a maximum of 12 credits in all  
enrollments for this course. P: CEP 351 and CEP 301 and CEP 339 and CEP 349 ~~R: Open to~~  
~~undergraduate students in the Special Education-Learning Disabilities Major.~~ R: Open to  
undergraduate students in the Special Education-Learning Disabilities Major. C: CEP 401  
concurrently or CEP 402 concurrently or CEP 403 concurrently  
Internship in heterogeneous classrooms. Increased emphasis on independent teaching.  
Teaching students with learning disabilities in classroom communities that ensure  
equitable access to important knowledge and skills. Assessing academic and social  
outcomes.  
Request the use of the Pass-No Grade (P-N) system.  
SA: CEP 502A  
Effective Fall Semester 2024

### **DEPARTMENT OF KINESIOLOGY**

- KIN 833 ~~Lower Body Therapeutic Interventions~~ Therapeutic Interventions I  
Fall of every year. 3(2-2) P: KIN 800 and KIN 801 and KIN 802 R: Open to students in the Athletic Training Major.  
Development, implementation, and evaluation of treatment plans. Therapeutic modalities and rehabilitation interventions for treating lower body injuries and general health conditions. Evidence-based approaches to therapeutic interventions.  
Effective Spring Semester 2025
- KIN 837 ~~Upper Body Therapeutic Interventions~~ Therapeutic Interventions II  
Spring of every year. 3(2-2) P: KIN 832 and KIN 833 and KIN 834 R: Open to students in the Athletic Training Major.  
Evidence-based approach to development, implementation, and evaluation. Treatment plans using therapeutic modalities and rehabilitation interventions in the treatment of upper body injuries and general medical conditions.  
Effective Spring Semester 2025

### **DEPARTMENT OF MANAGEMENT**

- MGT 352 Entrepreneurship: New Venture Process  
~~Spring of every year. Fall of every year. 3(3-0) P: ACC 202 or ACC 230 P: (ACC 202 or ACC 230) and ESHP 190 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Retail Management Minor and not open to students in the School of Hospitality Business. R: Open to juniors or seniors.~~  
Becoming an entrepreneur. Developing successful business ideas. Moving from an idea to an entrepreneurial firm. Managing and growing an entrepreneurial firm.  
Effective Fall Semester 2024

### **DEPARTMENT OF MECHANICAL ENGINEERING**

- ME 410 Heat Transfer  
Fall of every year. Spring of every year. 3(3-0) P: ~~(ME 332 or CE 321 or CHE 311) and ME 391 P: {(ME 332 or CE 321 or CHE 311) or (ME 333 and ME 333L)} and ME 391~~ R: Open to juniors or seniors in the Mechanical Engineering Major.  
Steady state and transient heat conduction. Natural and forced convection based on boundary layer theory. Application of Nusselt number correlations. Radiant heat transfer principles and applications including radiation networks.  
Effective Fall Semester 2024

### **DEPARTMENT OF MEDIA AND INFORMATION**

- UX 800 User Research and Design  
Fall of every year. Spring of every year. 3(3-0) R: ~~Open to master's students in the Department of Media and Information. Approval of department.~~ R: Open to master's students in the User Experience Major.  
History and overview of user research and user experience as a profession. Methods for understanding the needs and experiences of potential users of new technologies, and translating those into realistic design ideas, suggestions, and requirements that can serve as a basis for the creation of new technologies. Low-fidelity prototyping, gathering initial user feedback, and iterating on design ideas.  
Effective Fall Semester 2024

- UX 802      Current Topics in UX  
On Demand. 3(3-0)-~~R: Open to master's students in the Department of Media and Information-  
Approval of department.~~ R: Open to master's students in the User Experience Major.  
Cultural, technological, and design evolution of UX/UI. Critical examination of empirical  
research concerning social impacts of UX/UI. Focus on special issues and considerations  
related to new user interface modalities and application areas.  
Effective Fall Semester 2024
- UX 805      Quantitative Analysis and Insights for UX  
Fall of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Appropriate statistical models for UX research questions. Bivariate and multivariate  
techniques including various types of regression models to investigate and answer research  
questions in the field UX and communicate these quantitative results to both technical and  
nontechnical audiences. Data cleaning and manipulation.  
Effective Fall Semester 2024
- UX 810      Social Science for Design  
Fall of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Social science theories and concepts important for designing systems and user interfaces  
that people will be able to use efficiently, effectively and enjoyably.  
Effective Fall Semester 2024
- UX 815      Programming Fundamentals for UX  
Spring of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Fundamentals of programming in a team environment. Basic foundations in how to write  
computer programs, work with others to program computers, and move beyond simple  
programs to large-scale, professional software development.  
Effective Fall Semester 2024
- UX 820      Usability Evaluation  
Spring of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Plan, conduct, analyze, and report on usability evaluations of technology interfaces, products  
and applications, using methods that incorporate human participants and methods that do not.  
Effective Fall Semester 2024
- UX 825      Visual Design Fundamentals  
Summer of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Visual design software and processes, including aesthetics of typography, color, and  
iconography for user interfaces.  
Effective Summer Semester 2024
- UX 830      Design for Interactivity  
Summer of every year. 3(3-0) P: UX 800 or concurrently-~~R: Open to master's students in the  
Department of Media and Information. Approval of department.~~ R: Open to master's students in the  
User Experience Major.  
Process of designing and implementing interactive computing systems.  
Effective Fall Semester 2024

- UX 835      Accessibility and Design  
Summer of every year. 3(3-0) P: UX 800 or concurrently ~~R: Open to master's students in the Department of Media and Information. Approval of department.~~ R: Open to master's students in the User Experience Major.  
Designing, developing, and evaluating inclusive technologies for all individuals with different human abilities and disabilities.  
Effective Fall Semester 2024
- UX 840      UX and Society  
Summer of every year. 3(3-0) P: UX 800 or concurrently ~~R: Open to master's students in the Department of Media and Information. Approval of department.~~ R: Open to master's students in the User Experience Major.  
Develop core understanding and analysis techniques of dominant theories that situate technology in society across fields of Human Computer Interaction, Science and Technology Studies and Computer Supported Cooperative Work.  
Effective Fall Semester 2024
- UX 898      UX Capstone  
Fall of every year. Spring of every year. Summer of every year. 3(3-0) ~~R: Open to master's students in the Department of Media and Information. Approval of department.~~ R: Open to master's students in the User Experience Major.  
Conduct team-based capstone project from initial idea through high-fidelity prototype. Navigating project management, team-building, and budgeting in the context of UX design and research. Portfolio development.  
Effective Fall Semester 2024

### COLLEGE OF MUSIC

- MUS 163      ~~Class Instruction in Clarinet~~ Woodwind Methods  
Fall of every year. Spring of every year. ~~4(0-2)~~ 2(1-2) P: MUS 177 R: Open to undergraduate students in the Music Education Major.  
~~Techniques for playing and teaching clarinet.~~ Study of woodwind instruments; attention to characteristic tone production, playing techniques, and effective beginning wind pedagogy/instrumental ensemble instruction.  
Effective Spring Semester 2025
- MUS 165      ~~Class Instruction in High Brass Instruments~~ Brass Methods  
~~Fall of every year.~~ Fall of every year. Spring of every year. ~~4(0-2)~~ 2(1-2) P: MUS 177 R: Open to undergraduate students in the Music Education Major.  
~~Techniques for playing and teaching trumpet and horn.~~ Study of brass instruments; attention to characteristic tone production, playing techniques, and effective beginning wind pedagogy/instrumental ensemble instruction.  
Effective Spring Semester 2025
- MUS 166      ~~Class Instruction in Low Brass Instruments~~ Survey of Wind Instruments  
~~Fall of every year. Spring of every year.~~ Fall of every year. ~~4(0-2)~~ 2(1-2) P: MUS 177 R: Open to undergraduate students in the Music Education Major.  
~~Techniques for playing and teaching trombone, euphonium, and tuba.~~ Overview of wind instruments; introduction to characteristic tone production, playing techniques, and effective beginning wind pedagogy.  
Effective Spring Semester 2025

**DEPARTMENT OF PUBLIC HEALTH**

PH 837

Poverty and Public Health

~~Fall of even years.~~ Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: PH 801-RB: ~~Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work.~~ RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health Major or approval of college.

~~Concepts of health and poverty and their interrelatedness from a global and public health perspective. Roles of international agencies, national policy, gender, socioeconomic status, race, ethnicity, culture, access to resources, and conflict. Role of public health programs in the achievement and maintenance of healthy populations. Struggle to eliminate poverty. In-depth examination of intersection of poverty and public health from a U.S. and global perspective. Role of social inequities, structural factors and forms of oppression that generate poverty. Possible policy, advocacy, and other public health solutions to help eliminate poverty.~~

SA: HM 837

Effective Summer Semester 2024