

UNDERGRADUATE SEMESTER



CONVERSION GUIDE

MSOE faculty and staff have spent the past few years planning for a transition from a quarter-based academic calendar to a semester model. Beginning with the 2023-24 academic year, MSOE will follow a 16-week semester model. Each semester will be 16 weeks long (15 weeks of instruction and 1 finals week).

All students who enrolled at MSOE and not graduating prior to Fall 2023 will have an individualized transition plan developed in coordination and collaboration with their academic advisor. Students who are on track to complete their degree program at the time of the conversion to semesters and who stay on track after the conversion will not experience an extension to their time to degree completion.

Table of Contents

Individualized Transition Plans	3
Sample Transition Plan	3
Important Dates	4
Background and Additional Information	5
Guiding Principles	6
Course Codes and Numbering	6
General Education Program Requirements	8
Minors	8
Credit Conversions and Grade Point Averages	8
Course Substitutions and Grade Replacements	8
Transition Courses	9
Transfer Credits	9
Class Standing	9
Frequently Asked Questions (FAQs)	9

Individualized Transition Plans

An individualized transition plan will be developed by the academic advisor for all students who are enrolled prior to the 2023-24 academic year. The plan will be presented to each student no later than the 2022 Fall Quarter advising sessions which occur in November 2022. For students who enroll at MSOE after the Fall 2022 term, an individualized transition plan will be developed as part of their enrollment and advising process.

The transition plan will combine the quarter-based courses with the remaining semester-based courses that are required to earn the student's MSOE degree. It also assures that various curricular requirements are met such as content coverage, credit hours, general education, and accreditation requirements.

It is imperative that students engage with their academic advisor to discuss and agree to the specifics of the plan. Once a student's transition plan has been approved by the student, the academic advisor and the program director, the individualized transition plan will be filed with the Registrar's Office and serve as the formal document for assuring a student's achievement of their bachelor's degree requirements. An example of an individualized transition plan is shown below. A student's transition plan may look slightly different from the one shown in this figure, but it will contain similar information. The transition plan represents the student's new graduation requirements which are documented by the list of courses in the top section of the plan. The course scheduling section represents a suggested academic plan for completing these graduation requirements and can be modified in consultation with and approval by the student's academic advisor.

Individual Transition Plan for Last, First (ID#)
Software Engineering Transition in Year 4

Year 1			Year 2			Year 3			Year 4	
Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	S1	S2
<input checked="" type="checkbox"/> CS 1011 <input checked="" type="checkbox"/> EL CHBI <input checked="" type="checkbox"/> GS 1001 <input checked="" type="checkbox"/> MA 136	<input checked="" type="checkbox"/> CS 1021 <input checked="" type="checkbox"/> PH 2011 <input checked="" type="checkbox"/> MA 137 <input checked="" type="checkbox"/> GS 1002	<input checked="" type="checkbox"/> CS 2852 <input checked="" type="checkbox"/> PH 2021 <input checked="" type="checkbox"/> MA 2314 <input checked="" type="checkbox"/> GS 1003	<input checked="" type="checkbox"/> SE 2030 <input checked="" type="checkbox"/> CS 2911 <input checked="" type="checkbox"/> MA 2310 <input checked="" type="checkbox"/> EL MS <input checked="" type="checkbox"/> EL BUS	<input checked="" type="checkbox"/> CS 2711 <input checked="" type="checkbox"/> SE 2811 <input checked="" type="checkbox"/> SE 2840 <input checked="" type="checkbox"/> EL LabS	<input checked="" type="checkbox"/> CS 2040 <input checked="" type="checkbox"/> SE 2800 <input checked="" type="checkbox"/> SE 2832 <input checked="" type="checkbox"/> MA 262 <input checked="" type="checkbox"/> BA 3444	<input checked="" type="checkbox"/> CS 3860 <input checked="" type="checkbox"/> SE 3010 <input checked="" type="checkbox"/> SE 3800 <input checked="" type="checkbox"/> SE 3821 <input checked="" type="checkbox"/> OR 402	<input checked="" type="checkbox"/> CS 3840 <input checked="" type="checkbox"/> SE 3020 <input checked="" type="checkbox"/> SE 3810 <input checked="" type="checkbox"/> MA 3320 <input checked="" type="checkbox"/> EL SS	<input checked="" type="checkbox"/> CS 3851 <input checked="" type="checkbox"/> SE 3030 <input checked="" type="checkbox"/> MA 383 <input checked="" type="checkbox"/> HU 432 <input checked="" type="checkbox"/> EL Free	<input checked="" type="checkbox"/> SWE 4901 <input checked="" type="checkbox"/> SWE 4211 <input checked="" type="checkbox"/> ELC PLT <input checked="" type="checkbox"/> ELC SS <input checked="" type="checkbox"/> EL HU	<input checked="" type="checkbox"/> SWE 4902 <input checked="" type="checkbox"/> ELC PUT <input checked="" type="checkbox"/> ELC MS <input checked="" type="checkbox"/> ELC Free <input checked="" type="checkbox"/> ELC HU

Course Scheduling

	Fall Quarter	Winter Quarter	Spring Quarter
2020-21	<input checked="" type="checkbox"/> CS 1011 <input checked="" type="checkbox"/> EL CHBI - CH 200 <input checked="" type="checkbox"/> GS 1001E <input checked="" type="checkbox"/> MA 120 <input checked="" type="checkbox"/> OR 1910 Total: 16	<input checked="" type="checkbox"/> CS 1021 <input checked="" type="checkbox"/> GS 1002 <input checked="" type="checkbox"/> MA 136 <input checked="" type="checkbox"/> PH 2011 Total: 16	<input checked="" type="checkbox"/> CS 2852 <input checked="" type="checkbox"/> GS 1003 <input checked="" type="checkbox"/> MA 137 <input checked="" type="checkbox"/> PH 2021 Total: 16
2021-22	<input checked="" type="checkbox"/> CS 2911 <input checked="" type="checkbox"/> EL BUS - BA 2401 <input checked="" type="checkbox"/> MA 2310 <input checked="" type="checkbox"/> MA 2314 <input checked="" type="checkbox"/> SE 2030 Total: 17	<input checked="" type="checkbox"/> CS 2711 <input checked="" type="checkbox"/> EL LabS - PH 2031 <input checked="" type="checkbox"/> SE 2811 <input checked="" type="checkbox"/> SE 2840 Total: 16	<input checked="" type="checkbox"/> BA 3444 <input checked="" type="checkbox"/> CS 2040 <input checked="" type="checkbox"/> EL SS - SS 461 <input checked="" type="checkbox"/> MA 262 <input checked="" type="checkbox"/> SE 2800 Total: 16
2022-23	<input checked="" type="checkbox"/> EL MS - MA 2323 <input checked="" type="checkbox"/> MA 2310 <input checked="" type="checkbox"/> OR 402 <input checked="" type="checkbox"/> SE 3010 <input checked="" type="checkbox"/> SE 3821 Total: 15	<input checked="" type="checkbox"/> CS 3840 <input checked="" type="checkbox"/> HU 432 <input checked="" type="checkbox"/> MA 3320 <input checked="" type="checkbox"/> SE 3020 <input checked="" type="checkbox"/> SE 3810 Total: 17	<input checked="" type="checkbox"/> CS 3851 <input checked="" type="checkbox"/> EL Free - XX NONE <input checked="" type="checkbox"/> EL HU <input checked="" type="checkbox"/> MA 383 <input checked="" type="checkbox"/> SE 2832 <input checked="" type="checkbox"/> SE 3030 Total: 17
2023-24	<input checked="" type="checkbox"/> CSC 3320 <input checked="" type="checkbox"/> ELC MS <input checked="" type="checkbox"/> ELC PLT <input checked="" type="checkbox"/> SWE 4211 <input checked="" type="checkbox"/> SWE 4901 Total: 15	<input checked="" type="checkbox"/> ELC Free <input checked="" type="checkbox"/> ELC HU <input checked="" type="checkbox"/> ELC PUT <input checked="" type="checkbox"/> ELC SS <input checked="" type="checkbox"/> SWE 4902 Total: 15	

Graduation Requirements

Credit Thresholds	HU	HUSS	MathScience	Program	SS	Total
	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 31.7	<input checked="" type="checkbox"/> 63.3	<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> 122.7

Excluded	CS 3860 Replaced by: CSC 3320 Databases EL Free Free Elective GS 1001 Replaced by: GS 1001E Freshman Studies I SE 3800 Software Engineering Process II
Added	CSC 3320 GS 1001E MA 120 OR 1910

This curriculum replaces the one provided to you in the MSOE Undergraduate Academic Catalog upon entry to the University. All signatures below indicate confirmation of the agreed-upon graduation requirements. Additional details are provided in the Undergraduate Semester Conversion Guide.

Student (First Last):

Date:

Advisor (Christopher C Taylor):

Date:

Program Director (Sohum Sohoni):

Date:

Students will be notified by their department when their individualized transition plan is ready to be reviewed. **Students should be responsive to all communications from their department and/or program and keep all advising appointments.** Students should provide a timely review of their individualized transition plan and communicate with their advisor if there are issues that need to be further discussed.

A student's academic advisor will serve as the primary point-of-contact throughout the semester transition process. A student's program director and academic chair will also support the transition process in collaboration with the academic advisor and serve as additional resources if a student has concerns about their specific transition plan. Students should attempt to work out any transition issues with their academic advisor before bringing their concerns to the program director. If transition issues remain, the academic chair will serve as the final authority for addressing any student concerns regarding their individualized transition plan.

Students who apply for graduation prior to Fall 2023 but do not complete all of their graduation requirements in advance of the transition to semesters will complete their remaining quarter-based course requirements as documented on their graduation application or graduation audit through the use of semester-based course substitutions.

Important Dates

- **2022 Fall Quarter** – students meet with their advisors to discuss, develop and approve individualized transition plans
- **2023 Spring Quarter** – students meet with their advisors and finalize their 2023 Fall Semester courses and register for these semester courses during the regular course registration period (8th and 9th week of 2023 Spring Quarter)
- **Summer 2023** – MSOE's last term on the quarter system
- **Aug. 28, 2023** – classes start for the 2023 Fall Semester
- **Sept. 1, 2023** – last day to add a course or change course sections for the 2023 Fall Semester
- **Nov. 6, 2023** – last day to drop a course for the 2023 Fall Semester
- **Nov. 7, 2023** – start of the course registration period for the 2024 Spring Semester
- **Dec. 16, 2023** – Commencement exercises for the 2023 Fall Semester

See <https://www.msoe.edu/current-students/academic-calendar/> for additional calendar information beyond the 2023 Fall Semester.

Background and Additional Information

The quarter-to-semester conversion comes as a result of MSOE's strategic plan, which was developed by a cross-section of MSOE faculty, staff, students and alumni and approved by the Board of Regents. The plan called for MSOE to evaluate the current academic calendar model, as well as additional models, to ensure that the chosen academic calendar helps our students be successful in achieving their academic and professional goals while meeting the needs of our stakeholders (employers, corporate partners, alumni, etc.).

A task force was then convened to carry out this evaluation. After a year of researching all aspects of several academic calendar models, and soliciting input from MSOE stakeholders through meetings, surveys and interviews, the task force recommended that MSOE change to a semester-based model. Their recommendation was approved by the MSOE Leadership Team and is supported by the MSOE Board of Regents. The entire MSOE community is committed to working with each and every student to ensure the transition is as seamless as possible with no disruption to financial aid or time to degree completion.

The reasons for pursuing this transition include the following:

- MSOE's reputation for excellence is well known and its graduates are highly sought after for their quality, character, professionalism and ability to solve even the most complex challenges on day one. Even with this reputation and strong graduate outcomes, MSOE's strategic plan challenges us to be extraordinary—modeling continuous improvement by seeking every possible advantage we can deliver as we prepare our students for a lifetime of professional and personal success.
- Our research has shown there is a movement toward the semester model for top-tier institutions with fewer than 10% of institutions like MSOE continuing to operate on a quarter system (down from 25% in the 1980s). MSOE's application-oriented approach to teaching and learning is the main driver of our students' success. Our approach will not change once we transition to a semester model. There are a number of factors that support this transition:
 - The semester model will offer access to student exchange and study abroad opportunities with most international universities following a traditional semester model.
 - Transfer students will find their transition and transfer of credits to MSOE to be smoother.
 - The move to a semester model will better align with the needs of our industry partners and companies that hire our interns and graduates.
- A semester-based calendar will not compromise a student's time to degree completion or the expectations associated with an MSOE education. This transition will support student success by:
 - Giving students the opportunity to digest what they are learning and dive deeper into the course content during the additional time they'll have for each course.
 - Offering greater opportunities for high-impact educational practices and experiential learning.
 - Allowing time within the academic calendar to recover from illness or other interruptions in a student's schedule.
- A semester-based calendar will not impact MSOE's traditional academic expectations or approach to teaching. Our students will continue to receive an application-oriented education and be prepared for success in their careers.
- Our commitment to the MSOE Mindset will not change, and a semester-based calendar supports our belief that our students will become graduates who are leaders of character, responsible professionals, passionate learners and value creators.

Guiding Principles

Consistent with MSOE's values, students will be afforded every opportunity to successfully navigate the transition from quarters to semesters. Whenever possible, decisions will be made that are beneficial to the student.

Students who are on track to complete their degree program at the time of the conversion to semesters and who stay on track after the conversion will not experience an extension to their time to degree completion. Academic departments will develop individualized transition advising plans that demonstrate completion schedules based on the initial enrollment year of the student. Per the MSOE Guarantee policy, all classes needed for graduation for students who are on track will be available when they need them. Students who are not on track to complete their degree program at the time of conversion and/or do not stay on track after the conversion will work with their academic advisor to develop an individualized transition plan and establish a new graduation date based on this plan. MSOE will do its best to accommodate students who are not on track, however, issues with class availability may impact the specific schedule of courses that are documented on the student's transition plan.

Students who enroll at MSOE prior to the 2023-24 academic year are expected to achieve program-level credit hour requirements that are associated with the program's semester-based credit hour requirements. The program director and the academic chair have the discretion to allow undergraduate students to graduate from MSOE if their semester-based earned credit hours are no less than three credit hours from the total semester-based credit hours required for their program. Programs are also required to ensure that students who enroll at MSOE prior to the 2023-24 academic year meet all credit hour and/or course requirements for accreditation purposes.

Course Codes and Numbering

Under the semester system, course prefixes will consist of three characters and reflect the subject/discipline of the course:

- **Mathematics**
 - Actuarial Science: ACS
 - Mathematics: MTH
- **Business**
 - Business Administration: BUS
- **Civil and Architectural Engineering and Construction Management**
 - Common CAECM courses: CAE
 - Architectural Engineering: ARE
 - Construction Management: CON
 - Civil Engineering: CVE
- **Sciences**
 - Biology: BIO
 - BioMolecular Engineering: BIE
 - Chemistry: CHM
 - Physics: PHY
 - Science: SCI
- **Humanities, Social Science and Communication**
 - Anthropology: ANT
 - Art History: AHT
 - Communication: COM
 - Fine Arts: FNA
 - German: GER
 - History: HST
 - Humanities: HUM (used for transfer credit)
 - Philosophy: PHL
 - Spanish: SPN
 - Literature: LIT
 - Sociology: SOC
 - Political Science: PSC
 - Psychology: PSY
 - Social Sciences: SSC (used for transfer credit)
 - Technical Communication: TCM
 - User Experience: UXD

- **Electrical Engineering and Computer Science**

- Common EECS courses: CSE
- Computer Engineering: CPE
- Computer Science: CSC
- Electrical Engineering: ELE
- Biomedical Engineering: BME
- Perfusion: PER
- Software Engineering: SWE

- **Mechanical Engineering**

- Industrial Engineering: IND
- Mechanical Engineering: MEC

- **School of Nursing**

- Nursing: NUR

- **ROTC**

- Air Force: AIR
- Army: ARM
- Naval Science: NAV

- **Other Academic Areas**

- English for Academic Purposes: EAP
- General Engineering: EGR
- Interdisciplinary Studies: IDS
- MSOE Honors Program: HON
- Music: MUS
- Raider Center for Academic Support: RSC
- Undergraduate Research: UGR

Course numbers will consist of a four-digit number used to identify a course with the first digit of each course number indicating the academic level of the course. The remaining three digits of the course number shall be used by departments to indicate sequencing, grouping by discipline, and other advisory curricular information as follows:

- **0XXX - Pre-collegiate level**

- No credit allowed towards degree requirements

- **1XXX - Lower division**

- Focus is on knowledge and comprehension

- **2XXX - Lower division**

- Focus is on comprehension and application

- **3XXX - Upper division**

- Usually have prerequisites
- Focus is on application and analysis

- **4XXX - Upper division**

- Usually have prerequisites and may be restricted to certain groups
- Focus is on analysis, synthesis, evaluation, creation

- **5XXX - Graduate level**

- Open only to graduate students and upper-division undergraduate students with prior approval
- Focus is on attainment of advanced knowledge, skills, and methodologies in the discipline, beyond the bachelor's level

- **6XXX - Graduate level**

- Open only to unconditionally classified graduate students
- Focus is on synthesis, evaluation, and application of advanced knowledge, skills, and methodologies in the discipline, beyond the bachelor's level

- **7XXX - Graduate level**

- Culminating courses such as capstones, projects, theses, etc.
- Focus is on higher-order synthesis, application, and creation of advanced knowledge, skills, and methodologies

General Education Program Requirements

Students who are enrolled at MSOE prior to Fall 2023 will be required to successfully complete a minimum of 30 semester credit hours of the following semester-based general education program equivalents:

- **8 credit hours of foundational knowledge in communication consisting of the following courses:**
 - GS 1001, GS 1010H, or COM 1001
 - GS 1002, GS 1020H, or COM 2001
 - GS 1003, GS 1030H, or COM 3001
- **8 credit hours of foundational knowledge in college-level mathematics or sciences** (prefixed as BI, CH, MA, PH, BIO, CHM, MTH, PHY or SCI) with a minimum of 3 credit hours of college-level mathematics and a minimum of 2.67 credit hours of college-level science courses with an associated lab
- **12 credit hours of Humanities and Social Science courses that meet the following requirements:**
 - At least 4 credit hours of Social Science courses (prefixed as SS, ANT, SOC, PSC, PSY, BUS 2221, BUS 2222, BA 1220, BA 2220, or BA 2222)
 - At least 6 credit hours of Humanities courses (prefixed as HU, AHT, FNA, GER, HST, LIT, PHL, SPN, ARE 3821 or AE 3321). At least one of these courses must be an ethics course (HU332, HU432, HU4321, PHL 3101, PHL 3102 or PHL 3103)
- **2 credit hours of a program capstone experience**

A student's individualized transition plan will be designed to meet the general education program requirements noted above.

Minors

Academic departments have developed transition plans for minors that include options for students to complete the quarter-based minor using semester course substitutions, complete the semester-based minor using quarter course substitutions, or complete a hybrid plan using both quarter-based and semester-based courses. At the start of the 2023-24 academic year, students will only be allowed to declare the semester-based minor and are not allowed to declare a quarter-based minor. Students who declare a quarter-based minor prior to the 2023-24 academic year will be provided with a transition plan for the completion of the minor.

Credit Conversions and Grade Point Averages

Starting with the 2023-24 academic year, all credits earned during the quarter-based system will be converted to semester-based credits and, as noted previously, students will be evaluated against the semester-based requirements for their degree program. The conversion factor is 2/3 since a quarter-based term has 10 instructional weeks and a semester-based term has 15 instructional weeks. In other words,

$$\text{semester-based credit hours} = 2/3 * \text{quarter-based credit hours}$$

This conversion factor will be automatically applied to a student's academic record through the Registrar's Office. A student's transcript will document courses taken both during the quarter-based system and the semester-based system, however, the total credits attempted and earned will reflect the equivalent semester-based credit hours. A student's grade point average (GPA) will not change as a result of the credit conversion process and no credits will be lost through the conversion process because a student's academic record is being evaluated with respect to a semester-based curriculum.

Course Substitutions and Grade Replacements

A semester-based course that contains at least 80 percent of the course material covered in a quarter-based course or course series may be substituted for the quarter-based course or course series. The semester-based course may be used to replace the grade in the quarter-based course or course series per MSOE's grade replacement policies. Upon the recommendation of the academic chair, the Vice President of Academics will provide final approval for removing courses from a student's GPA calculations that can no longer be substituted or have the course's grade replaced. See the undergraduate catalog for more information regarding the policies that govern repeating and grade replacing courses.

Transition Courses

Prior to and directly after the transition to semesters, the institution may offer a limited number of transition courses that are created specifically to assist students in the completion of quarter-based course sequences. These transition courses may be offered during the 2023 Spring Quarter, 2023 Summer Quarter and 2023 Fall Semester and will be available subject to demand. Students are strongly encouraged to complete course sequences prior to the conversion to semesters. Students who are on track to complete their degree program at the time of the conversion to semesters will not need to take any 2023 Summer Quarter transition courses in order to remain on track for degree completion.

Transfer Credits

Under the quarter system, students who transfer semester-based course credits to MSOE are given course credit hours that are associated with the appropriate quarter-based course. For students who enrolled at MSOE prior to the 2023-24 academic year, academic programs have the authority to apply semester-based transfer credits that are earned prior to the 2023-24 academic year to semester-based course requirements on a case-by-case basis. At the start of the 2023-24 academic year, all transfer credits will be evaluated relative to MSOE's semester-based courses.

Class Standing

In general, undergraduate students are classified by the number of semester credits earned as follows:

- Freshman – fewer than 30 credits
- Sophomore – at least 30 credits but fewer than 60 credits
- Junior – at least 60 credits but fewer than 90 credits
- Senior – at least 90 credits

However, students who enroll at MSOE prior to the 2023-24 academic year will be classified based on their equivalent semester-based earned credit hours as follows:

- Freshman – fewer than 26 credits
- Sophomore – at least 26 credits but fewer than 58 credits
- Junior – at least 58 credits but fewer than 90 credits
- Senior – at least 90 credits

Frequently Asked Questions (FAQs)

What will the academic calendar look like?

- Instead of three 10-week quarters, we will transition to two 15-week semesters. Each semester will conclude with a final exam week. There will no longer be a winter quarter that is interrupted by the holiday break. Academic calendars are available in the MSOE undergraduate and graduate catalogs and on the MSOE website.

Will students learn less information? More information? Will the class offerings change?

- Students will not miss out on any learning opportunities. Courses are being rewritten, and faculty are working diligently to incorporate all subject matter into the new system. More information regarding course names, numbers, content and equivalencies will be shared as through the transition planning process. Students will continue to receive an application-oriented education and graduates will be prepared to hit the ground running.

How will this affect students who are currently enrolled? Will the required number of credit hours to graduate change?

- There will be no change to students' anticipated graduation dates for those students who are following their nominal curriculum track. Currently enrolled students will have an individualized transition plan which includes their time on the current quarter calendar and remaining time on a semester calendar. The required number of credit hours to graduate will be adjusted accordingly. We are very student-centric at MSOE and are committed to work with every student to make sure they move through the transition as seamlessly as possible.

Will tuition costs change?

- Overall annual tuition costs will not change as a result of the transition to semesters. On the semester calendar, payments will be simplified to be due twice per year instead of three times.

Will financial aid and scholarships be affected?

- If students continue to meet the federal and institutional requirements, converting to a semester calendar will not affect the total amount of financial aid students may receive. Aid will be divided equally among two semesters and disbursed twice per year instead of three times. The refund process will remain the same—financial aid will be applied to student accounts and any excess funds (refund) will be returned by direct deposit (if students are signed up for this service) or through the mail.

Who should students contact if they have questions pertaining to their individual situation?

- Students should contact their academic advisor, program director or chair of their academic department for academic-related matters and the financial aid or student accounts offices for financial-related matters.

EDIT LOG

DATE	PAGE(S)	CHANGE SUMMARY
Nov. 16, 2022	4	Added paragraph about students who apply for graduation prior to Fall 2023 but don't complete all graduation requirements.
Oct. 11, 2022	8	In second bullet point under General Education Program requirements, changed minimum number of credit hours of college-level science courses with an associated lab from 3 to 2.67.