JumpStart 3rd Year- Presentation

School of Engineering

Undergraduate Academic Advising

Computer Science and Engineering

What is Jump Start Your Third Year (JS3)?

It is a campus wide initiative to help second-year students transition to the Schools and connecting with them faculty and staff who can offer major-specific guidance and career related resources to support their progress towards a degree.

Topics

- Degree requirements

- MyDegreePath – Audit
    - Creating Graduation Plans and resources
    - Degree requirements and GE fulfillment

- Things you should know
    - Policies
    - Taking classes at another college
    - Majors, Minors and Double Majors

- Important links
- Career Planning

- Recap of JS3 Requirements
    - Webform Quiz and Career Event

Degree Requirements

Requirements are based on the Catalog Year you entered:

2024-2025

catalog.ucmerced.edu

Audit via MyDegreePath and UCM Portal (https://myconnect.ucmerced.edu/)

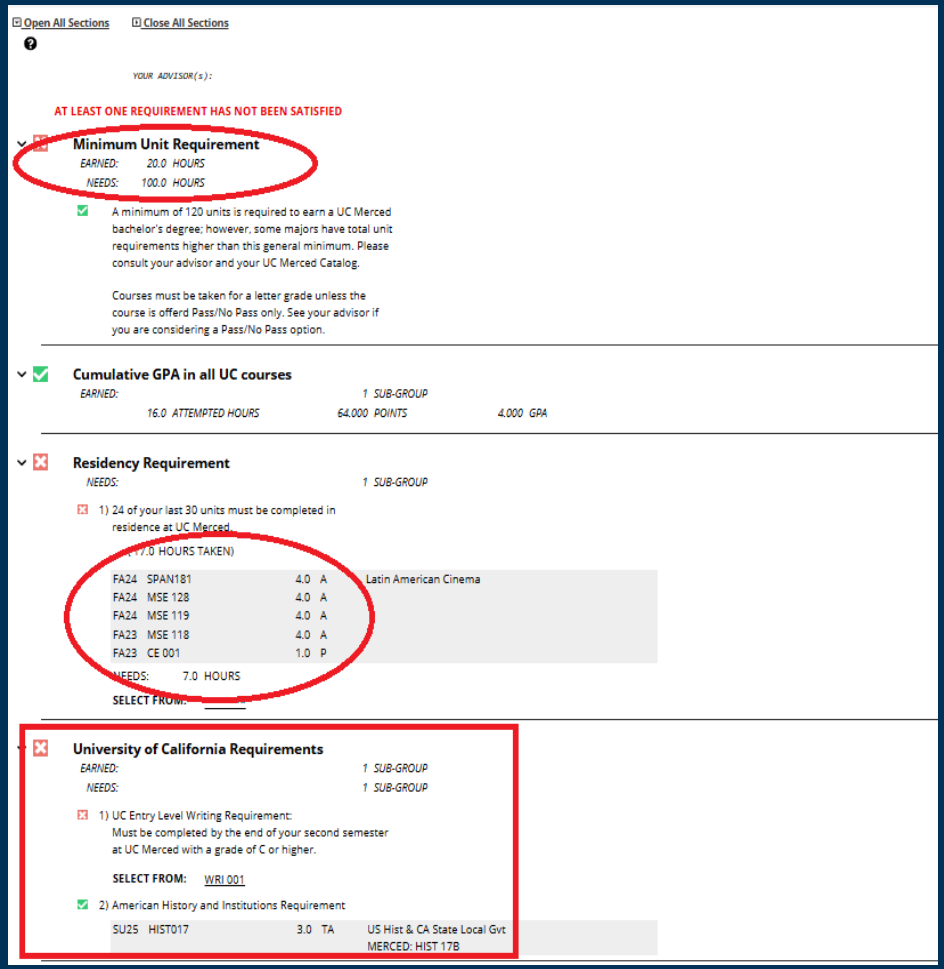
AUDIT

Audit – All Degree Requirements

- University Requirements

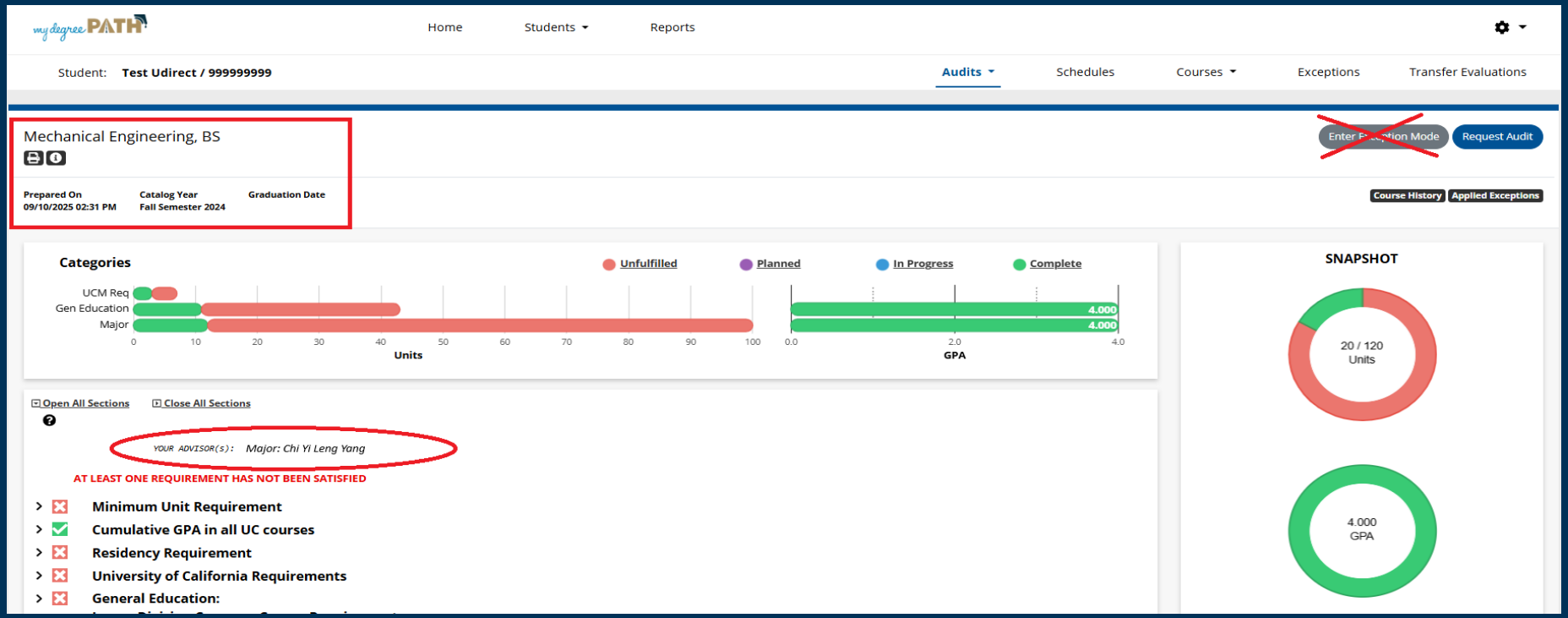
- General Education (GE):
  - Lower Division
  - Upper Division
  - Life Science and Physical Science
  - GE Social Science and 2 from Literary and Textual, Media and Visual **OR** Societies and Cultures

- Major Requirements – “Select From”
- Emphasis
- Intellectual Experiences – Plan courses to fulfill a maximum of 2 Experiences



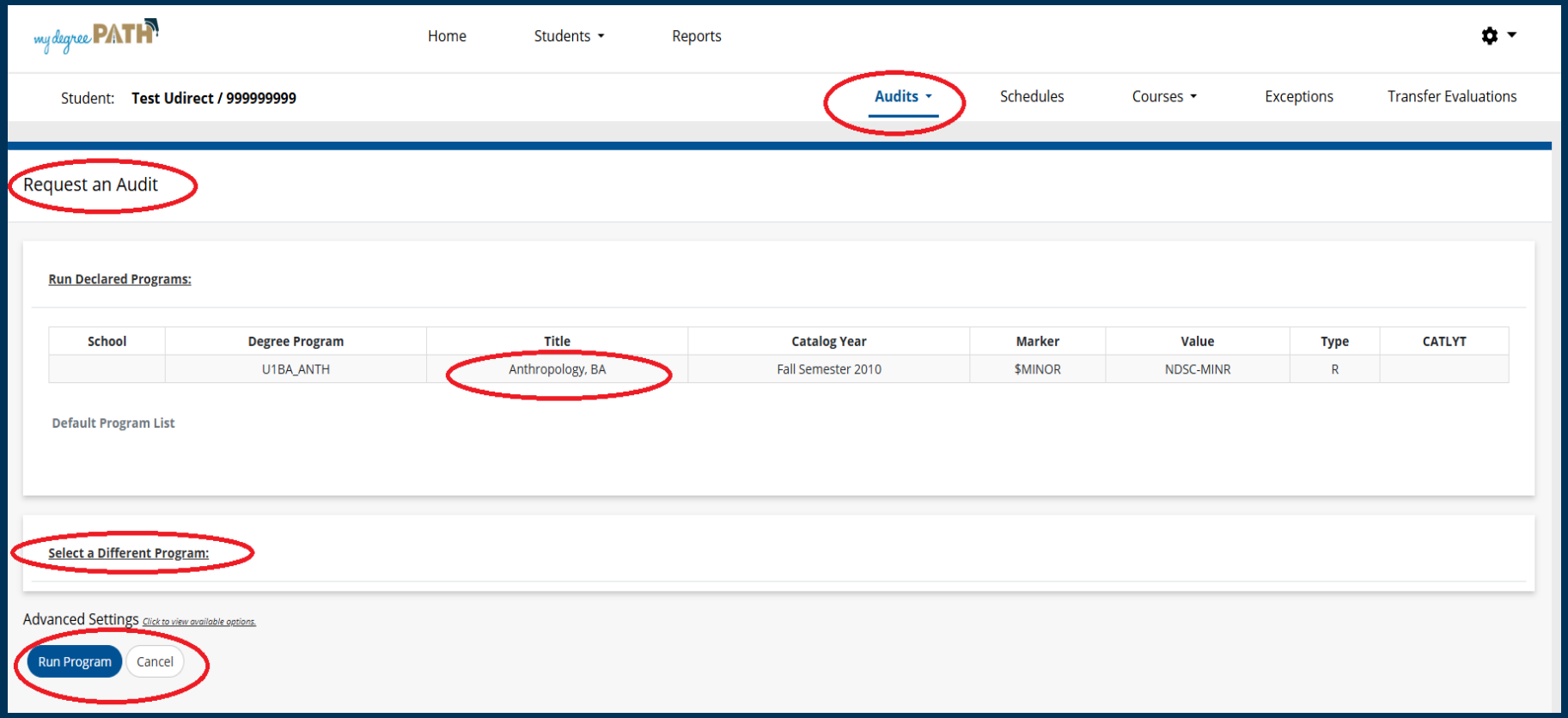
Degree Requirements

- 120 minimum units for degree completion
- Minimum 2.0 cumulative GPA
- Academic Residency Requirement (24 out of last 30 units must be completed at UC Merced)

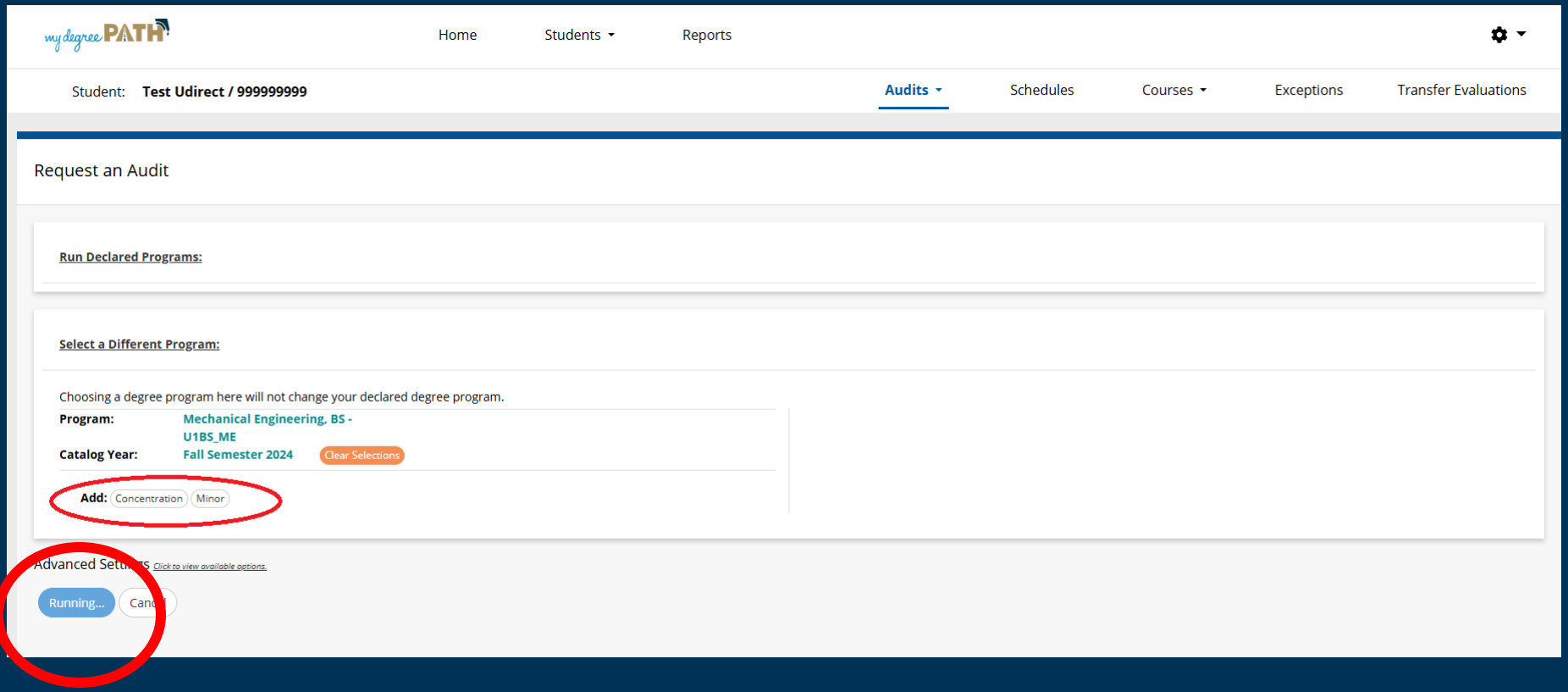


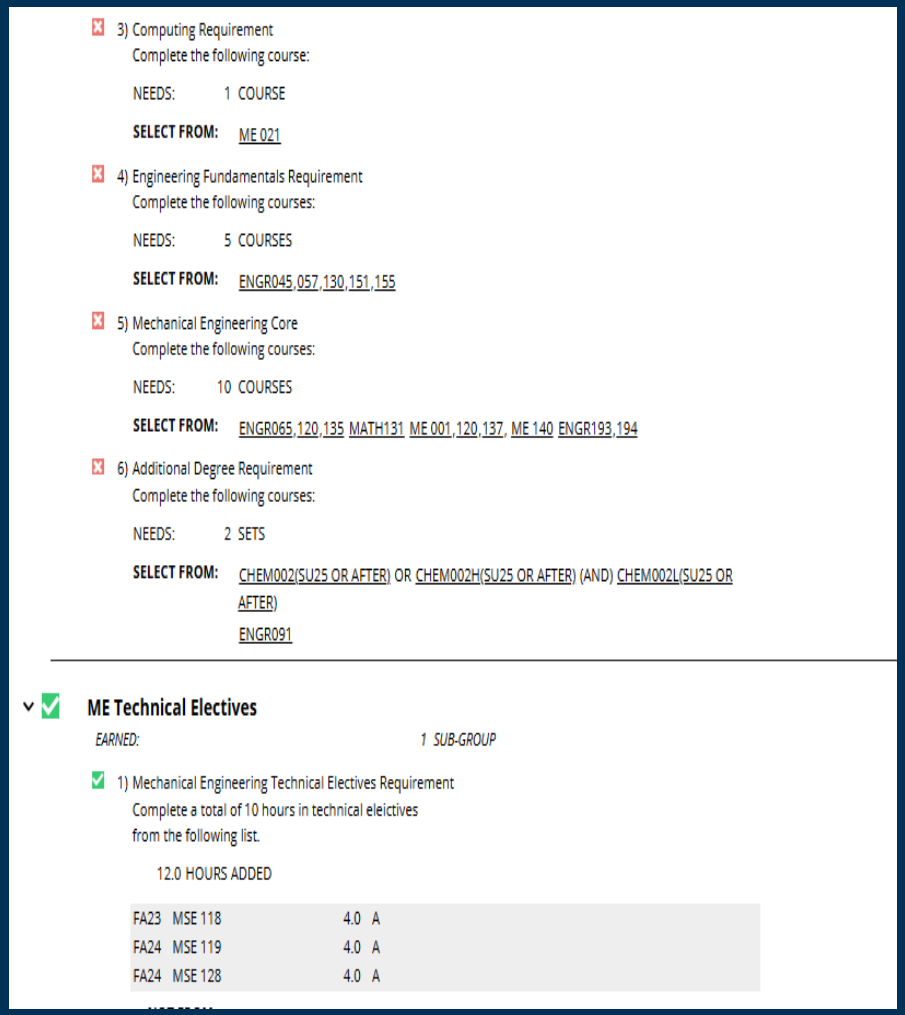
- An audit is your official student record
- Includes all of your completed, in-progress and outstanding degree requirements
- After making changes to your courses (adding/dropping) it is recommended you run an audit to see how your changes reflect on your remaining degree requirements

Running a Degree Audit using MyDegreePath



Explore Requirements for Minors/Majors “What IF” Audit





Note the following:

- , and on **Audit**
- IP vs letter grade
- Non – UC transfer work
  * no GPA
- Course and unit credit may not be up to date, contact Advisor or Registrar
- Official Transcripts only way to update official credit
- Official AP/IB needed as well

Again, for an Audit report:

1. log into my.ucmerced.edu,
2. select “MyStudentRecord”
3. select “MyDegreePath”
4. Select “Audit”
   1. Run Program

Creating Grad Plans

MyDegreePath upgrade currently does not have the feature to create a Graduation Plan.

- You can ask your Advisor
- Use your Legacy Plan from the older version of MDP
- Access one on our website (https://engr-advising.ucmerced.edu/jumpstart3)

Other Resources to create a Graduation Plan –

- MyDegreePath Audit & Catalog (2024)
- 4 Year Plan (https://engr-advising.ucmerced.edu/majors)

SCHOOL OF ENGINEERING
UCMERCED

Name _____

School of Engineering: Graduation Planning

Semester: Fall 2015 Semester #5 (Example)

Course	Title	Units
MATH 032	Statistics	4 units
ME 021	Engineering Computing	4 units
ART 003B	Intermediate Painting (Arts/Humanities GE)	4 units
ENGR 045	Introduction to Materials	4 units

Semester_____

Course	Title	Units

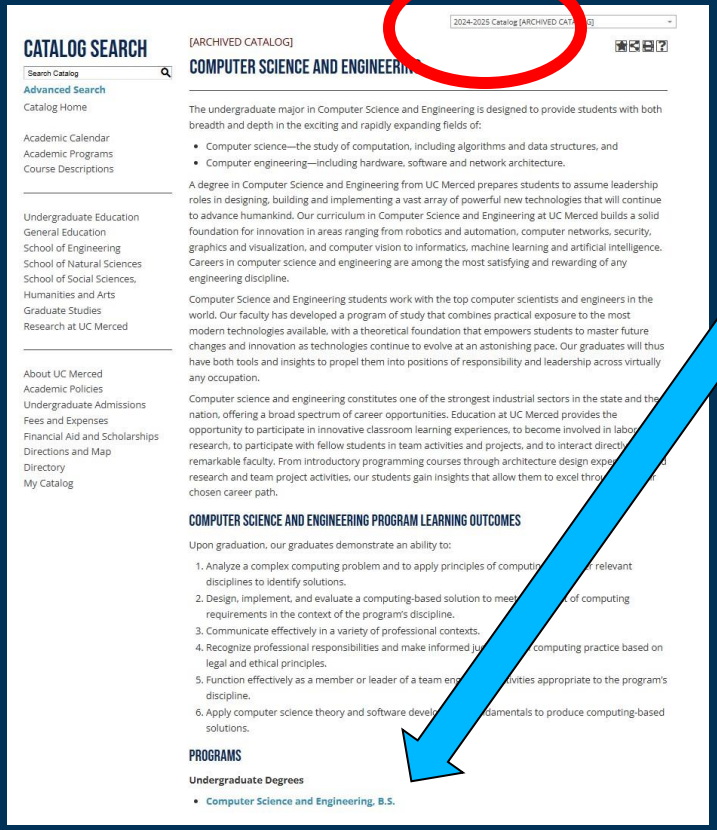
Semester_____

Course	Title	Units

Semester_____

Course	Title	Units

Make sure to use your Catalog Year

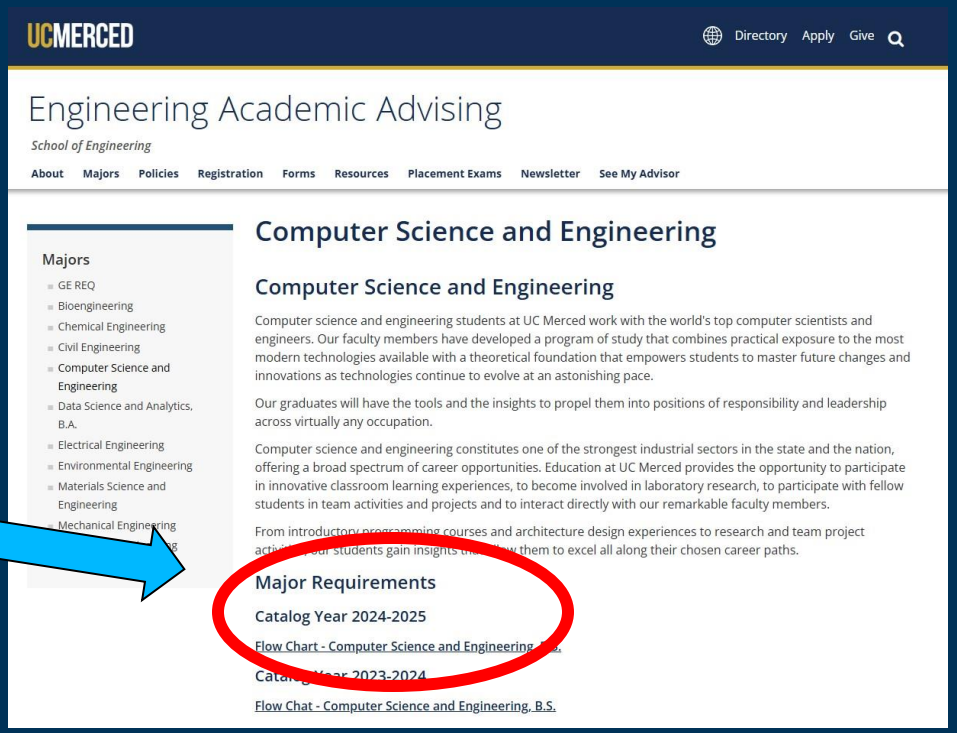


4 Year Course Plan:

https://catalog.ucmerced.edu/content.php?catoid=23&navoid=2429

https://engr-advising.ucmerced.edu/majors

*not all catalog years may have a flow chart



Computer Science and Engineering Major

2024-2025 Catalog [ARCHIVED CATALOG]

[ARCHIVED CATALOG]

COMPUTER SCIENCE AND ENGINEERING, B.S.

In addition to adhering to General Education, students must meet the following requirements to receive the B.S. in Computer Science and Engineering at UC Merced.

All students in the School of Engineering, regardless of major, are required to complete all requirements for all majors with a C- or better unless the course is offered as Pass/No Pass only, which requires a P grade.

Students in the School of Engineering must repeat a required course after receiving a grade of D+, D, D-, F, Unsatisfactory, or Not Passed, and may do so no more than twice beyond the initial enrollment in the class. Students may repeat a course only one time (for a total of two attempts to earn a C- or better). If students do not complete these requirements, they may take these courses at another institution or petition the school who hosts the course for a third attempt. The third attempt is not guaranteed at UC Merced.

Computer Science and Engineering, B.S. Four-Year Course Plan

REQUIRED MAJOR PREPARATION [30 UNITS]

All School of Engineering students are required to complete the following lower-division major preparation courses.

MATHEMATICS REQUIREMENT [20 UNITS]

Complete the following five courses:

- MATH 021: Calculus I for Physical Sciences and Engineering Units: 4
- MATH 022: Calculus II for Physical Sciences and Engineering Units: 4
- MATH 023: Vector Calculus Units: 4 or MATH 023H: Honors Vector Calculus
- MATH 024: Linear Algebra and Differential Equations Units: 4
- MATH 032: Probability and Statistics Units: 4 or ENGR 080: Statistical Modeling and Data Analysis

PHYSICS REQUIREMENT [10 UNITS]

Complete the following four courses:

- PHYS 008: Introductory Physics I for Physical Sciences Units: 4 or PHYS 008H
- PHYS 008L: Introductory Physics I for Physical Sciences Lab Units: 1
- PHYS 009: Introductory Physics II for Physical Sciences Units: 4 or PHYS 009H
- PHYS 009L: Introductory Physics II for Physical Sciences Lab Units: 1

COMPUTER SCIENCE AND ENGINEERING CORE [32 UNITS]

The computer science and engineering core consists of 8 courses (6 lower division and 2 upper division) designed to provide students with a common foundation of core knowledge specific to the discipline.

LOWER DIVISION REQUIREMENT [24 UNITS]

Complete the following courses:

- CSE 015: Discrete Mathematics Units: 4
- CSE 022: Introduction to Programming Units: 4
- CSE 024: Advanced Programming Units: 4
- CSE 030: Data Structures Units: 4
- CSE 031: Computer Organization and Assembly Language Units: 4
- ENGR 065: Circuit Theory Units: 4

UPPER DIVISION REQUIREMENT [8 UNITS]

Complete the following courses:

- CSE 100: Algorithm Design and Analysis Units: 4
- CSE 120: Software Engineering Units: 4

TECHNICAL ELECTIVES REQUIREMENT [30 UNITS]

A total of 30 units of Engineering technical electives are required. A minimum of 20 units must be CSE upper division or graduate courses outside of Core classes. Any combination of classes such as MATH 131, MATH 141, Engineering fundamental courses, all Engineering Upper division courses and all Engineering Graduate courses can be used to satisfy the remaining 10 units. Other upper division courses outside your major area of study can be selected with approval. A maximum of 4 units of Undergraduate Research (CSE 195) may be used.

PROFESSIONAL DEVELOPMENT REQUIREMENT [2 UNITS]

- ENGR 091: Professional Development: People in an Engineered World Units: 2

TIPS for CSE Major

Math and lower division CSE courses are priority to move forward in the CSE Major

Plan GE and Major requirements for your career focus

Most Upper Division CSE courses require CSE 031, Math 024 and CSE 100

CSE Faculty recommend no more than 3 Upper Division CSE courses per term due to the rigor

Plan ahead!

COMPUTER SCIENCE AND ENGINEERING, B.S. FOUR-YEAR COURSE PLAN

All General Education course options can be found here.

FIRST YEAR

Fall	Spring
MATH 021: Calculus I for Physical Sciences and Engineering	MATH 022: Calculus II for Physical Sciences and Engineering
WRI 010: College Reading and Composition	CSE 015: Discrete Mathematics
CSE 022: Introduction to Programming	CSE 024: Advanced Programming
SPRK 010: Spark Seminar or SPRK 001: Spark Seminar	General Education: AREA B
	ENGR 091: Professional Development: People in an Engineered World

SECOND YEAR

Fall	Spring
MATH 023: Vector Calculus	MATH 024: Linear Algebra and Differential Equations
MATH 032: Probability and Statistics or ENGR 080: Statistical Modeling and Data Analysis	CSE 031: Computer Organization and Assembly Language
CSE 030: Data Structures	CSE 100: Algorithm Design and Analysis
General Education: AREA A-Life Science	General Education: AREA B

THIRD YEAR

Fall	Spring
PHYS 008: Introductory Physics I for Physical Sciences and PHYS 008L	PHYS 009: Introductory Physics II for Physical Sciences and PHYS 009L
Major Technical Elective	Major Technical Elective
Major Technical Elective	Major Technical Elective
General Education: AREA B	General Education: Writing in the Discipline

FOURTH YEAR

Fall	Spring
ENGR 065: Circuit Theory	CSE 120: Software Engineering
Major Technical Elective	Major Technical Elective
Major Technical Elective	Major Technical Elective
Free Elective	Free Elective

Look at course prerequisites ahead of time

Example: CSE 100 requires CSE 015, CSE 024, and CSE 030 as PRErequisites AND CSE 031 and Math 024 as COrequisites

Pay attention to Capstone requirements -

CSE 120 requires Senior standing CSE 031, Math 024 and CSE 100, and it is recommended to pass 2-3 upper division CSE courses before you take CSE 120 Software Engineering Capstone

GE's, Social Science, Arts & Humanities, & Intellectual Experiences

Plan courses for your future career. 1 course may fulfill a maximum of 2 Intellectual Experiences.

- Social Science GE – Select from the approved course requirement list.
- 2 Required from: Literary and Textual, Media and Visual **OR** Societies and Cultures– Select from the approved course requirement list.

Plan to fulfill Diversity and Identity, Global Awareness **AND** Sustainability Intellectual Experiences (Some options: Anth 001, Anth 005, CRES 020, ENG 018, ENG 032, GASP 006, HIST 051)

- Engr 091 fulfills Ethics Intellectual Experience
- Math 021 fulfills Quantitative Reasoning
- CSE 022 fulfills the Language Requirement
- Life Science Bio 034 **OR** Bio 043 may fulfill Global Awareness **AND** Sustainability Intellectual Experiences
- Phys 008 fulfills Physical Science **AND** Scientific Method Intellectual Experience
- Engr 180 may fulfill Global Awareness and Sustainability Intellectual Experiences
- CSE 160 (Fall course) may fulfill Sustainability Intellectual Experience

Upper Division Common Course Requirements

Culminating Experience – CSE 120

Crossroads – CSE 100

Writing in the Discipline – Engr 156 (Spring offered course) or Select from another course from the approved course requirement list

Things you should know

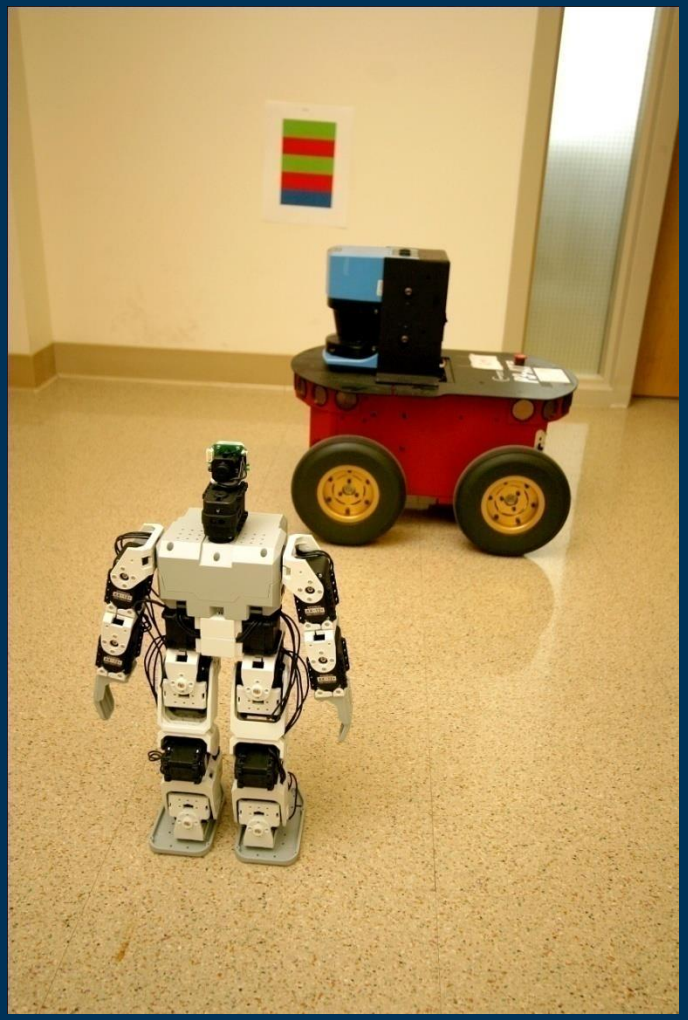
- Courses and their requirements can and do change (pre-requisites), so make sure you communicate with your advisor regularly, check your email and the Course Schedule for updates

- *Full-Time Status*: Students must enroll in at least 12 units each semester

- *Journey to 30:* Students must enroll in 15 units per semester to graduate in 4 years

- You have 10 semesters as an Engineering major to complete your degree (summers are not included) Financial Aid up to 180 units of consideration.

Note – if you take courses in summer terms, adjust your remaining requirements. Plan for internships and research during summer to build your resume!



Normal Progress to Degree Policy

https://engr-advising.ucmerced.edu/policies/normal-progress

Student progress is reviewed every Fall term by the School of Engineering. If a student is not meeting the Normal Progress standard, the School may place a hold on the student's academic record, which can prevent registration for future terms.

Normal Progress is defined as follows:

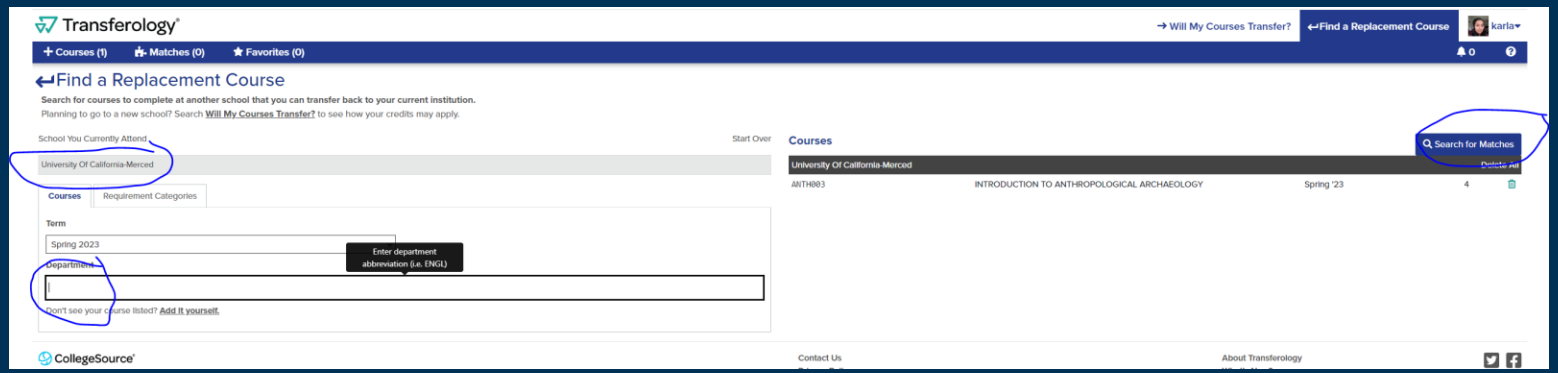
1. Register in at least 12 units per semester and two classes must be major prep (math/science), Engr or Major-specific, or technical requirements.

2. Complete the degree requirements within 10 terms. Summer sessions are not counted as semesters for Normal Progress.

Any student who fails to achieve Normal Progress will be subject to dismissal and will need approval to continue at UC Merced. Any student can petition the School of Engineering if failure to make Normal Progress is due to extenuating circumstances beyond their control.

Taking Classes During Summer

- Taking Classes at UC Merced
  - Enroll in at least 6 units to apply for UC Merced Summer Financial Aid (if applicable)
- Taking classes at another institution
  - Make sure course is equivalent to UC Merced course by using Transferology.com or Assist.org
  - Apply to the college, send them your UC Merced Official Transcript, and enroll in courses
  - Send Unofficial Transcript (FREE) to your Academic Advisor Enrollment – After June 1st ENGR Advisor and verify Fall overrides.
    Final Grade – Before the start of the next term to update overrides.
    Official Transcript to the Office of the Registrar for official course credit.

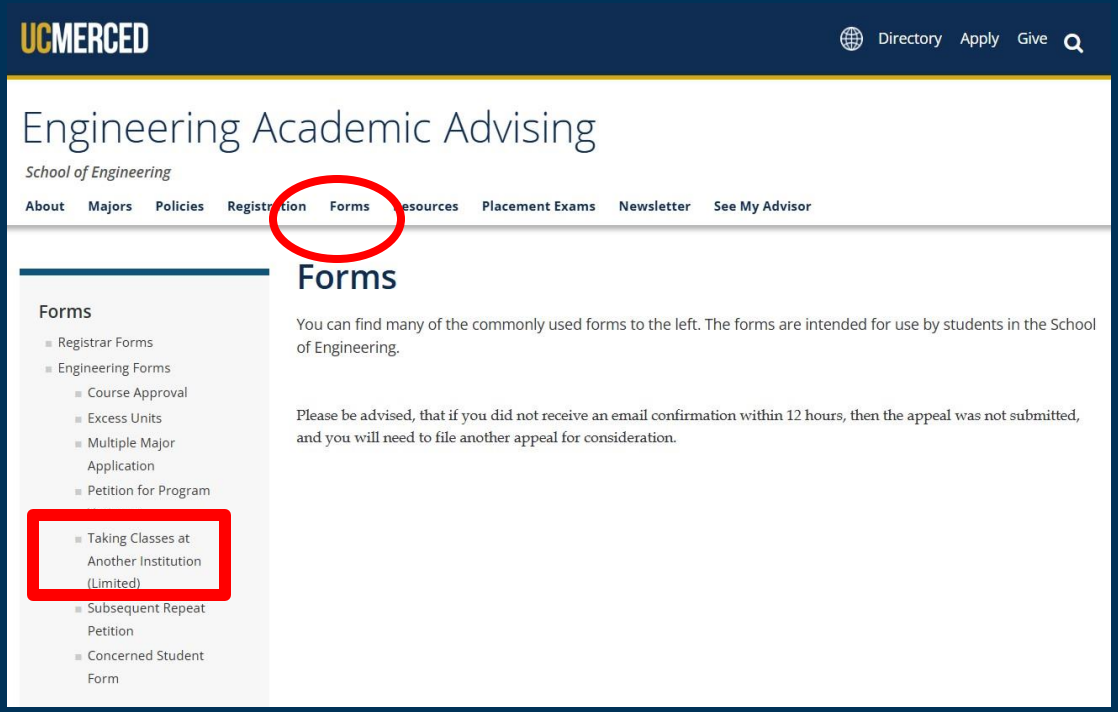


Can I Take Courses Outside of UC Merced during Fall or Spring?

- During the Fall or Spring semester, you can take ONE course with UC Online, Merced College or any other Community College

- You must be enrolled in 12 units at UC Merced. *UC Online requires Good Academic Standing.*

- Requirement: "Taking Classes at Another Institution" Form through our website. Attach your Unofficial Transcript of enrollment.



UC Online courses count towards the total units at UC Merced and will calculate into the UC Merced GPA.

Courses taken at Community College will provide course credit only.
You must send your Advisor the Unofficial Transcript and the Office of the Registrar your Official Transcript of your final letter grade.

Can I Add a Minor or Double Major?

You can add a minor or double major starting in your 2nd year.

There are some double majors that cannot be approved due to the similarity of requirements [Read the policy on our website]

Example: ME and AE https://engr-advising.ucmerced.edu/forms/engineering-forms/multiple-major-application

Double Major: Only 12 units can be shared

Minor: One course may be shared between the Major and the Minor at this time

How to Declare? Office of the Registrar website – Forms - Minor Change Form / Multiple Major Packet

Important Links

engr-advising.ucmerced.edu

- All School of Engineering Policies
- Appointments and Walk-in Hours
  See My Advisor tab
- Major information and flow charts
- Engineering specific forms
- About – Vanguard and Professional Clubs and Organizations

Registrar.ucmerced.edu

- All University policies, procedures, and deadlines
- Registrar forms (Add, Time Conflict, Independent Study, Major/Minor, etc.
- Registration Help Page

Advising.ucmerced.edu

- For general campus advising information.

Don't "Google" it – look within the site or catalog

Internship and Project-Based Resources

Non-Competitive Project-Based Experience

- Student Clubs and Orgs

Ex. National Society of Black Engineers (NSBE), Robotics Society, SHPE, Society of Women Engineers (SWE), Association for Computing Machinery, BobCAD, Human-Centered Technology & Design, Machine Learning Club, and Mi3 Student Association

1. Vanguard https://engr-advising.ucmerced.edu/student-orgs
2. Office of Student Involvement - https://ucmerced.presence.io/organizations

Semi-Competitive Internship Experience

- Undergraduate Research Opportunities Center – for paid internship for UC Merced Students only https://uroc.ucmerced.edu/
- Volunteer Research with UCM Professors via Independent Study - https://engineering.ucmerced.edu/faculty/by-department
- **Student Career Center** - https://hire.ucmerced.edu/

Competitive Internship Experience

- Job/Internship Boards https://hire.ucmerced.edu/engr/jobs-and-internships
- STEM Center list (public and federal)- https://stemcenter.ucmerced.edu/opportunities
- Great Mind in STEM conference

JumpStart Your 3rd Year Requirements:

- Complete your next two terms [Spring 2026/Fall 2026] plan. (Summer is optional)

- Attend/view one workshop hosted by the School of Engineering (this one). Use the information provided in this workshop to complete the quiz. Check your UC Merced email for the quiz link.

https://ucmerced.az1.qualtrics.com/jfe/form/SV_3I1vk27f38AfRMa

JumpStart Your 3rd Year Requirements:

- Attend one career-related event with the Center for Career and Professional Advancement [Highly Recommended]

  hire.ucmerced.edu

- Meet with your Academic Advisor to review your plan for the next year and share what you discovered for your career planning.

QUESTIONS?

Engineering Advising:

Location: Science & Engineering 2, Room 315

Availability: https://engr-advising.ucmerced.edu/see-my-advisor for walk-Ins or appointments via Zoom or In-person.

Emails: https://engr-advising.ucmerced.edu/see-my-advisor/appointment