# UNIVERSITY OF MICHIGAN <br> College of Engineering <br> Curriculum Committee Meeting <br> Tuesday, October 24, 2023 

Attending: Achilleas Anastasopoulos, Sarah Barbrow, Robert Bordley, Yavuz Bozer, Chris Fidkowski, Fei Gao, Robin Fowler, Amir Kamil, Xiaogan Liang, Cameron Louttit, Frank Marsik, Radoslaw Michalowski, Eric Rutherford, Mika Panagou, Anchal Sareen, Ben Spector, Andy Tadd, Roxanne Walker

Support Staff: Mercedes Carmona, Betsy Dodge, Matthew Faunce

## Call to Order: 1:35 PM

## Adjourned: 2:14 PM

## Agenda:

1. Approval of 10.10.2023 Meeting Minutes (Page 2) - APPROVED
2. Re-visit - Non-Attendance Drop Statement Proposal - Action Item (Page 6)
a. Undergraduate Education \& ENGR: Two issues that arise from this are attendance in the first week or so of the term to establish enrollment in the course and continued attendance/participation in the course throughout the term. A revised policy would make sense for the following as: 1) team-based courses (such as ENGR 100, capstone design, etc.) 2) Lab components that require in person attendance 3) Lecture based courses with waitlists. LSA Policy implies to secure a spot in the course, students are expected to attend the first couple of course meetings and if that does not occur, then instructors have the discretion to drop the student if there is no legitimate reason provided for the student's absence. This process could already be happening currently, but CoE could formally adopt a policy like this for courses. Attendance is an issue for courses that require (team-based courses) vs those that are not as critical for the course/after the first week. Would it be realistic for a waitlisted student to join a class, catch up and be successful beyond the first week of classes? The policy would need to be effective by the $2^{\text {nd }}$ or $3^{\text {rd }}$ weeks of a term. Waitlisted students would be negatively impact by not attending after the first couple of weeks, hence there would need to be a policy so that teams are not left because of a student's absence. Overall, option 2 is supported to create a modified non-attendance statement and procedure.
b. CSE: If a student is dropped, this could cause further issues such as a student losing financial aid or student visa. In agreement, from previous meeting, that attendance should be made part of the grade.
c. ME: Also in agreement, but states that the instructor should not have the power to drop students. A clear statement needs to be made that will hopefully encourage students to make a commitment to their courses.
d. IOE: ABET visit taking priority so no feedback has been retrieved from the department but will follow back up with any information. How are we to enforce a statement if we agree to one? This could lead into more issues such as timing, how this impacts instructors. Making attendance part of the grade is a concern as how would you take attendance for larger courses with $90+$ students. What would be the appropriate value for the grade? Are we to come up with this ourselves or would the policy have a specific percentage needed for a course? As a result, this would create a lot of work for everyone involved.
e. ROB: Similar concerns to IOE and how can a student be dropped soon enough in order for a waitlisted student to be a part of the course. The statement would affect courses differently. What is the overall goal for this statement as not everyone can attend courses due to working or other conflicts.
i. Main purpose is to lessen the waitlist for courses, students to take team-based courses seriously, and overall enforce attendance.
f. CEE: No support from the department for a statement.
g. CHE: No waitlist concerns, but still reluctant to have a policy in place. Attendance in lab courses or 100 level courses makes it difficult for the instructor to hand out equitable workload due to attendance issues with students. Avoid the policy, but communicate clearly to students, in classes that attendance is an issue, that attendance is going to be factored into the course's overall grade.
i. Some agreement in an enforcement policy needed along with a statement.
h. UG Student: Preventative type of measure is needed before a student is dropped. Perhaps, future course registration can have a flag of some sort that reflects the student had attendance issues so that the instructor is aware.
i. Vote taken with the same options listed as the previous meeting. Option 3 ( $10 / 17$ members) had the majority vote that departments/units are to not allow administration to drop students from classes based on non-attendance.
i. In $2^{\text {nd }}$, was Option $2(7 / 17)$ to create a modified non-attendance statement and procedure, with details to be determined by the CoE CC.
3. Re-visit - Review of Professional or Creative Development Courses (PCDC) Degree Audit Rule - Action Item (Page 7)
a. UG Education \& ENGR: PCDC is only optional for IB and HU is required, it seems that the HU designation should be the stronger determiner, thus I support Option \#3.
i. CSE, NERS, \& ROB: Also, in agreement with this option.
b. Vote taken with the same options listed as the previous meeting with Option 3 having a unanimous vote.
4. Contradicting Double Counting Policies - Action Item (Page 9)
a. UG Education \& ENGR: I don't see why a course shouldn't be double counted for a plan of study that doesn't show up on the diploma. If the course is relevant to both the plan of study and major, minor, etc., it makes sense to count it. However, as Fred and Susan mentioned, I think we want to discourage students trying to game the system to get as many of these supplemental studies on their transcripts by taking as few courses as possible and trying to triple (or more) count them, so I think it should be limited to double counting only. I vote for Option 2, to either remove \#6 or modify the language of the Supplemental Studies Policy.
b. ECE: Split credits among the supplemental studies and minors.
c. Minor policy states that credits cannot be shared with multiple minors.
i. Policy states: No course can count towards more than two majors, and no more than one major and one minor. A course can only count toward two minors if the credits received for that course are beyond the 128 credits required for the student's major.
d. Vote taken with two options listed from the document. Option 2 had a majority of votes to remove contradiction or modify the language for the Supplemental Studies Policy. Most members agree that the \#6 bullet point is to be removed from the policy but keep the Double Counting Policy as is.

EECS CARFs with Subject Changes to ECE or CSE - Bulk Review

| PAGE | SUBJECT | COURSE \# | ACTION | SUMMARY | EFFECTIVE <br> TERM | MIN. GRADE <br> REQ. FOR <br> ENF. <br> PREPREQ | Course <br> on LSA <br> Course <br> Guide? | APPRROVED | NOTES \& REVISIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 2}$ | SI | $\mathbf{5 6 5}$ | MOD | TABLED <br> Department, Subject Change <br> for Cross Listing, Course <br> Credit Type. | FT 2024 | NO | YES | APPROVED | Cross listed with EECS 597 |
| and LING 702. |  |  |  |  |  |  |  |  |  |
| The Home Unit can modify the |  |  |  |  |  |  |  |  |  |
| Course Description if needed. |  |  |  |  |  |  |  |  |  |

## UNIVERSITY OF MICHIGAN

College of Engineering

## Curriculum Committee Meeting

Tuesday, October 10, 2023

Attending: Achilleas Anastasopoulos, Jack Baker, Robert Bordley, Yavuz Bozer, Chris Fidkowski, Fei Gao, Saadet Albayrak Guralp, Amir Kamil, Leena Lalwani, Xiaogan Liang, Cameron Louttit, Emmanuelle Marquis, Frank Marsik, Radoslaw Michalowski, Mika Panagou, Anchal Sareen, Ben Spector, Roxanne Walker

Support Staff: Mercedes Carmona, Betsy Dodge, Matthew Faunce
Call to Order: 1:36 PM

## Adjourned: 2:46 PM

## Agenda:

1. Approval of 9.26.2023 Meeting Minutes (Page 2) - APPROVED
2. Re-visit - Non-Attendance Drop Statement Proposal - Action Item (Page 6) - TABLED
a. After CoE members spoke to their departments regarding this proposal, the following was gathered:
i. MECHENG: Main concern was how teamwork and student participation, with certain courses, would be affected if this proposal were to become established. Students need to make a commitment in the beginning of the course and therefore instructors feel there is no need for a policy. There would be no replacement for the student if there were involved on a team or project. Local policy for teamwork and students to make a strong commitment for the course.
ii. CEE: Overall, no conclusion was reached and there was little support for a policy to be made. By faculty members having the power to drop a student, there may be an abuse of power that would come with this, and this should be avoided if possible. Department relays comments but also says that this should not stop CoE from establishing a statement if needed.
iii. ISD: CoE member states no attendance is taken, but students' participation is measured in assignments, exams, projects, etc. Questions if LSA takes attendance for the policy to implemented and if that's how LSA instructors determine to drop a student or not. Response to this was that no information could be given regarding how LSA uses or enforces their policy based on attendance taken or not.
iv. IOE: Lectures are recorded and makes it easier for students who miss lecture to follow up on their own and not get behind in the course. Example given of instructor asking questions in lecture for students that are actively attending and receiving extra credit towards the student's overall grade as a result.
v. CLASP: College wide policy would be difficult, and student would have to petition to override if dropped due to non-attendance, creating more work for faculty to complete as a result. Suggestion of EAC being brought in to do a wellness check on the student if there is a consistent absence from the course, gather information from the student if they are given a response, and this is communicated to the instructor before an immediate drop would be taken.
vi. NAVARCH: There needs to be an intermittent step taken, like what CLASP has suggested that the EAC is involved and communicates to the instructor as to why the student hasn't been attending the course.
vii. NERS: A policy can be drafted and sent to the departments to go over and collect feedback to continue the discussions had regarding this proposal.
viii. ECE: Instructors already have milestones throughout a course so that a policy wouldn't need to be in place as this would be harsh and can be achieved by other means. Looking for more feedback from department chairs.
ix. TCHNCLCM: A group of students to focus on are waitlisted students and how a policy would have an impact. Students not showing up for the first few weeks of classes are hurting waitlisted students who want to take the course and continue their academics. This policy would also affect financial aid students and if these students can be flagged and not to be lost in the process of dropping due to their attendance.
3. International students would also be affected as this would put the student below being a full-time student and cause problems with their Visa.
x. ROB: Policy is supported but needs to be executed well. Waitlist example also mentioned as well as EAC or RO to be involved for the student not actively participating in the course and to gather information as to why. This would also help international students take the courses they need while being here for the main terms of the year, Fall and Winter. Example of growing conference and student athletes traveling more as a result would also be in class less, so how would they be affected by this. CoE member suggests to further discuss this to the entire CoE so that everyone can have an opinion or consensus regarding the proposal. Also gives example that their lectures are recorded, and the student completes their work on their own and keeps up with the course, but still not physically attending lecture, so should this student by faulted by this. More clarity is needed and what situations would this policy be applied to. Would each department or course instructor(s) need to establish their own policy for this to be effective?
xi. BIOMEDE: Waitlists also brought up as already mentioned by other departments and how larger lectures such as 200 level courses are affected. Counterpoint that reaching out to the student and gathering information is fair, but what is the timeframe for this as if this takes too long, then a waitlisted student could fall farther behind in the course as a result. There needs to be a reasonable time when to reach out to the student after not attending the course.
xii. EECS: Agrees with ROB. The department has no attendance required for courses. Reiterates the department used to have an attendance policy in place for students, that was removed due to students viewing this as harmful, negative. The department is not interested in a blanket statement policy to be established.
b. A point made that if groups for courses are formed immediately and other aspects are not deemed as of importance, then does the policy depend on the course level and what would this policy look like as well as if there is no communication from the student, how do we proceed. Overall, question of how does one measure attendance for a course.
i. CoE RO states the instructor can do this and that the RO would support, but there needs to be a clear, concise statement that is widely viewed by all that this can happen based on a specific course and what specific actions would be taken. Do we want a generalized statement, to copy LSA's, or for CoE to create our own? What is the best route to go forward?
ii. Suggestion that this can also be a statement of attendance for the specific courses that need this to be enforced. Each department can develop their own information to be in this statement.
4. Example that students thought attendance was optional for a course, but there was a message that would be visible and public for students that stated the student would be dropped if there was no participation after a week. This message would appear in Wolverine Access or LSA Course Guide.
a. Issue brought up that some students don't get access to the course entirely until after the first week of classes. This is why a statement would be more effective to appear on Wolverine Access.
i. Counterpoint that students do not read information given, such as on a Syllabus or Wolverine Access, as there are so many policies in place and reading is getting lengthier, therefore would be overlooked.
b. UG Representative states that having statements on the LSA Course Guide and/or Wolverine Access would be helpful. The more redundancy of a statement/policy listed for a course, the better to overall get the messaged across. Agrees that students aren't reading lengthy syllabus, so that another policy/statement would be missed if included.
5. Mentioned if this statement should be put on a CARF, but ultimately deemed that a CARF submitted for just this statement, would not be deemed as the best method.
c. To end the discussion, a poll was conducted for members with the options listed as, LSA Policy, Modified Policy, or No Policy.
i. Members voted in favor for the Modified Policy by $81 \%$ ( 13 members) vs No Policy by $19 \%$ ( 3 members).
6. The follow up discussed was that more information is to be gathered and discussed at the next CoE CC meeting on 10.24.2023.
ii. CoE member suggests that this might be helpful for Rachael, who represents the ENGR and Undergraduate Education Departments as a CoE CC member, to be of assistance as she represents a large portion of students to be effective by this proposal.
7. Xiaogan to follow up with Rachael.
8. Re-visit - Review of Professional or Creative Development Courses (PCDC) Degree Audit Rule - Informational Item (Page 7) - TABLED
a. Updated responses from Fred and Susan:
i. Highlighted areas in document speaks as to why PCDC was created and the intent of this.
ii. Question from previous meeting if there was a historical agreement with LSA regarding the PCDC Degree Audit Rule, and there is not.
iii. Susan supports option 3 for what way to move forward with PCDC Degree Audit Rules.
iv. Fred didn't have an option to move forward with and didn't see this as an issue and really is for the courses that didn't fit any other Liberal Arts or Humanities Intellectual Breadths. Can count both courses towards Intellectual Breadth, but more what the designation is to go to for courses.
b. Overall feedback from departments as is follow:
i. MECHENG - PDCD optional, HU should be the stronger designation.
ii. NAVARCH - Agreement in Option 3 listed.
c. Due to the time constraint and needing to get to the CARFs on the agenda, there was an agreement that more feedback is to be gathered by departments and continue the discussion at the next CoE CC meeting on 10.24.2023.
9. Upcoming ABET Visit
a. A CoE member mentioned that some CoE CC members will have to miss the meeting due to time conflicts with the CoE CC meeting and the ABET visit.
i. CoE CC Chair suggests finding a replacement member so votes can be taken, and discussions can continue to be had.

| PAGE | SUBJECT | COURSE <br> \# | ACTION | SUMMARY | EFFECTIVE TERM | MIN. <br> GRADE REQ. FOR ENF. PREPREQ | Is Course on LSA Course Guide? | APPROVED | NOTES \& REVISIONS | TABLED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | CSE | 543 | MOD | Change in Cross Listing. | WT 2024 | NO | NO | APPROVED |  |  |
| 12 | EECS | 367 | MOD | Change in Home Department, Cross Listing, and Course Components Terms Offered. | WT 2024 | C | YES | APPROVED |  |  |
| 15 | EECS | 495 | MOD | Change in Course and Abbreviated Titles, Course Description. | WT 2024 | C | YES | APPROVED |  |  |
| 18 | IOE | 474 | MOD | Change to Course Credit Type and Course Components. | WT 2024 | C- | YES | APPROVED | Suggestion of Course Title to be modified to be more descriptive. |  |
| 21 | ROB | 103 | MOD | Change in Course Catalog Number, Course Description, Full-Term Credit Hours, Grading Basis, and Course Components. | WT 2024 | NO | NO | CONDITIONALLY <br> APPROVED | List ENGN 100-Sec 850 for Credit Exclusion. <br> Suggested Course Description corrections, "Student develop..." and "...milling, etc." |  |
| 25 | ROB | 560 | NEW |  | WT 2024 | NO | NO | CONDITIONALLY <br> APPROVED | Course Description needs to list course topics. |  |


| PAGE | SUBJECT | COURSE \# | ACTION | SUMMARY | EFFECTIVE TERM | MIN. GRADE REQ. FOR ENF. PREPREQ | Is Course on LSA Course Guide? | APPROVED | NOTES \& REVISIONS | TABLED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | ROB | 572 | NEW |  | WT 2024 | NO | NO | APPROVED | Cross listed with NAVARCH 569. |  |

EECS CARFs with Subject Changes to ECE or CSE - Bulk Review

| PAGE | SUBJECT | COURSE \# | ACTION | SUMMARY | EFFECTIVE <br> TERM | MIN. GRADE REQ. FOR ENF. PREPREQ | Is Course on LSA Course Guide? | APPROVED | NOTES \& REVISIONS | TABLED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | EECS | 595 | MOD |  | FT 2024 | NO | YES | APPROVED | Cross listed with LING 541 and SI 561. |  |
| 54 | SI | 649 | MOD |  | FT 2024 | C- | YES | APPROVED | Cross listed with EECS 548. |  |
| 57 | SI | 650 | MOD |  | FT 2024 | NO | YES | APPROVED | Cross listed with EECS 549. |  |
| 60 | SI | 652 | MOD |  | FT 2024 | NO | YES | APPROVED | Cross listed with EECS 547. |  |

## Non-Attendance Drop Statement Proposal

The CoE Registrar's Office received an inquiry regarding whether a CoE professor could administratively drop a student from their engineering class section due to inactivity.

After reaching out to the Registrar's Office to inquire about this possibility, the CoE RO learned that Engineering currently does not have a statement that students will be dropped for non-attendance. LSA does currently have a non-attendance statement, which can be reviewed below.

A recent example was a project-based course (ENGR 100) in which students needed to be assigned to teams and waiting until the end of the course and giving the student an ED grade could impact the team projects.

LSA's Policy Statement:

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IT IS CRITICAL THAT STUDENTS ATTEND CLASSES FROM THE BEGINNING OF THE TERM. EVEN
THOUGH STUDENTS MAY BE REGISTERED OFFICIALLY FOR A COURSE, DEPARTMENTS MAY GIVE
AWAY A STUDENT'S PLACE IN A CLASS IF THEY DO NOT ATTEND:
---THE FIRST MEETING OF BIOLOGY, CHEMISTRY, AND PHYSICS LABORATORIES;
---EITHER OF THE FIRST TWO MEETINGS OF ENGLISH COURSES;
---THE FIRST TWO MEETINGS OF HISTORY 496 AND 497;
---EITHER OF THE FIRST TWO MEETINGS OF ANY COURSE OFFERED BY THE DEPARTMENT OF
ROMANCE LANGUAGES;
---THE FIRST TWO MEETINGS OF COURSES IN OTHER SUBJECTS.
AT THE SAME TIME, DEPARTMENTS ARE NOT OBLIGATED TO WITHDRAW STUDENTS OFFICIALLY FROM THE COURSE, EVEN THOUGH THE STUDENT HAS BEEN INFORMED THAT HIS/HER PLACE IN A COURSE HAS BEEN TAKEN AWAY. STUDENTS ARE RESPONSIBLE FOR THE ACCURACY OF THEIR SCHEDULES AND MUST BE SURE THAT ALL DROPS ARE PROCESSED THROUGH REGISTRATION SYSTEM DURING THE NORMAL DROP/ADD PERIOD.
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The CoE RO is bringing this information forward to the CoE Curriculum Committee to decide on a path forward. A non-exhaustive list of a few identified options are as follows:

1. Adopt the same (or similar) non-attendance statement and procedure as LSA, which would allow the unit's curriculum coordinator permission to approve of and request a non-attendance class drop for a given student by reaching out to the Registrar's Office (wolverineservices@umich.edu).
2. Create a modified non-attendance statement and procedure (details would be determined by the CCC).
3. Do not allow departments or units to administratively drop students from classes on the basis of non-attendance.

# Review of Professional or Creative Development Courses (PCDC) Degree Audit Rules 

CoE Bulletin Language:

## Intellectual Breadth

It is important that our students learn about modes of thought and areas of human accomplishment beyond the purely technical. This breadth can be designed by students to provide context to their engineering work by learning about human modes of thought, the structure and history of the human societies that they serve as engineers, how humans behave and interact, and how humans express their aspirations in the arts, literature and music. This breadth will help students to understand the impact of engineering solutions in a global, economic, environmental and societal context. This breadth makes our students more flexible, creative and better able to work with diverse groups.

We cannot precisely define all of these possibilities for every student so we strive to create a broad intellectual opportunity for students to pursue their interests both beyond and within engineering. Students are encouraged to use these credits in a coherent way to build a foundation of understanding in both the liberal arts and other disciplines that might contribute to their development of creativity or professional foundation.

The College of Engineering requires all students to complete 16 credits of Intellectual Breadth coursework, and between 9 and 16 credits of General Electives (depending on engineering major). To satisfy the Intellectual Breadth requirement, students must complete the following:

- 16 Intellectual Breadth Credits: Comprised of Liberal Arts Courses (LACs - defined in the following section of the Bulletin titled, "Definition of Liberal Arts Courses"), including:
- Humanities: At least 3 credits of Humanities classes marked HU in the LSA course guide, credit by test cannot be used to meet this requirement
- 300-level LAC: At least 3 credits of LAC must be at the 300 level or higher.

Students may satisfy the Humanities and $300-l e v e l$ requirements with a single course.

- (Optional) PCDC - no more than 4 credits of PCDC (defined in the following section of the Bulletin titled, "Professional or Creative Development Courses"


## Professional or Creative Development Courses (PCDC)

Professional and creative development courses are optional and offer a student the opportunity to build on non-engineering and non-technical courses to develop their creativity and professional capabilities as engineers. PCDC courses include any course from the following subjects in the indicated units, provided they are not marked BS (Bachelor of Science) or NS (Natural Science) in the LSA course guide:

- Taubman College of Architecture and Urban Planning: Architecture (ARCH), Urban Design (UD), Urban Planning (UP), Urban and Regional Planning (URP—Effective FA 17)
- Stamps School of Art \& Design (ARTDES, UARTS)
- Ross School of Business: Accounting (ACC), Business Administration (BA), Business Economics and Public Policy (BE), Entrepreneurial Studies (ES), Business Law \& Business Communication (BL\&BCOM), Marketing (MKT), Management and Organization (MO), Strategy (STRATEGY)
- School of Music, Theatre \& Dance: Music Composition (COMP), Musicology (MUSICOL), Music Theory (THEORY), Theater \& Drama (THTREMUS) and MUSPERF 300/PAT 305 (this course is an exception, no other PAT/MUSPERF courses will satisfy PCDC requirement)
- School of Environment and Sustainability (EAS)
- Ford School of Public Policy (PUBPOL)
- School of Public Health: Health Behavior \& Health Education (HBEHED), Health Management \& Policy (HMP)
- College of Engineering: Center for Entrepreneurship (ENTR) - Effective WN 2018 (ENTR coursework taken FA 2013 and later can be used to satisfy PCDC requirements)

As an example, ARCH 215 has the HU course attribute and is also PCDC. How should this course be treated?

Here is a scenario. Let's say a student has:

- PUBPOL 200.4 credits, FA22 (PUBPOL is on the PCDC list)
- ARCH 215.4 credits, FA23 (ARCH is on the PCDC list, and ARCH 215 counts as HU)

Having PUBPOL 200, the student has reached the limit of 4 PCDC credits that can count toward 16 IB credits.
What should happen in the audit when the student takes ARCH 215? There are 3 options:

1. ARCH 215 should not count toward the 3 credits of Humanities requirement, and should not count toward 16 IB credits.
2. ARCH 215 should count toward the 3 credits of Humanities, but should NOT count toward the total 16 IB credits. (The student will need 3 credits of something else to count toward the 16 IB credit total.)
3. ARCH 215 should count toward BOTH 3 credits of Humanities AND toward the 16 IB credits even though the 4 credits max had been met with PUBPOL 200. (Basically, the HU designation negates the PCDC designation.)

The current understanding of the rule is \#3, should we continue this, or follow the old rule that says HU courses should not be allowed in PCDC.

After reaching out to other faculty members, Fred Terry's response, "The PCDC section was to allow space for 16 credit hours for classes that made sense but did not fit the other narrow definitions. There is no need to designate a PCDC on an audit unless the class would otherwise not fit in IB as HU or other LAC class."

Susan Montgomery's response, "PCDC was included to allow a broader range of experience into IB without compromising the overarching requirement of a Liberal Arts experience. HU doesn't need to be allowed for PCDC because as HU it already counts, but some courses might fall under both categories because it fits the description of both (LSA approved it as an HU and it falls into the course categories we count for PCDC). There was no agreement with LSA involved. It's not so much that HU courses should not be allowed in PCDC, but that the HU designation trumps the PCDC designation." She supports option \#3.

# Contradicting Double Counting Policies 

CoE Bulletin/Concentrations and Supplemental Studies:

## Supplemental Studies Policy

An engineering supplemental studies program is a coherent program of study, but with requirements far less comprehensive than those of a BS/BSE degree or minor. Supplemental studies can be sponsored by CoE departments, programs, or, for the purpose of supporting cross-departmental programs, sponsored by the Office of the Associate Dean for Undergraduate Education.

Undergraduate supplemental studies can provide opportunities for Engineering students to develop additional experience and skills to complement their major(s) or minor(s).

Engineering undergraduate students may complete one or more supplemental studies programs approved by the College. Electing to earn supplemental studies is optional, and there is no limit to the number of supplemental studies a student may elect.

Supplemental studies must require no fewer than nine credits of coursework, show structure and coherence, and contain some upper-level courses.
Students who declare and complete approved supplemental studies will receive a notation on their student transcript but not on their diploma.

## Policies for Supplemental Studies:

1. An Engineering student may complete one or more supplemental studies programs.
2. Each student who wishes to complete a supplemental studies program must develop a plan in consultation with a program advisor.
3. After developing a plan with the student, the program or department advisor has the supplemental studies program entered into the student's record.
4. Students may not elect courses included in a supplemental studies program using the pass/fail grading option.
5. A department or program may include experiential or directed reading/independent study courses that are graded on a credit/no credit
basis in a supplemental studies program, but all other courses in the supplemental studies program must be taken for a grade.
6. No course may be shared between the requirements of two supplemental studies programs, or between a minor and a supplemental studies program.
7. One course may be shared between the departmental course requirement and the supplemental studies program.
8. Advanced Placement (AP) credits may not be used to meet the requirements of a supplemental studies program.
9. A student must earn an overall GPA of at least 2.0 in the required courses in the supplemental studies program.
10. Courses elected to meet the requirements of a supplemental studies program may count toward Intellectual Breadth and General Electives.
11. Students may not complete a supplemental studies program after graduation, and a supplemental studies program may not be converted to an academic minor after graduation.

## CoE Bulletin/Graduation:

## Double Counting Courses

For Engineering Undergraduate students:

1. No course can count towards more than two degrees, such as two bachelor's degrees or one bachelor's degree and one master's degree.
2. No course can count towards more than two majors, and no more than one major and one minor. A course can only count toward two minors if the credits received for that course are beyond the 128 credits required for the student's major.
3. No course can count towards more than one requirement within a BSE program. Double counting a course for credit towards more than one requirement is not allowed. A single course can qualify to meet the requirements of multiple sections of the BSE, but must formally count towards one requirement.
4. A course can count toward Supplemental Studies, Concentrations/SubPlans or Honors Programs regardless of how many majors or minors it is already counting towards.
5. SUGS (Sequential Undergraduate Graduate Studies) students who are pursuing a Rackham or College of Engineering master's degree can only double count courses that are considered general electives or technical electives and are not part of the core requirement. The number of credits allowed to double count is determined by the individual departments, with 9 credits being the maximum allowed by Rackham. MDDP (Multiple

Dependent Degree Program, typically referred to as Dual Degree) students are not eligible for the SUGS program.
6. Non-SUGS students pursuing a master's degree from Rackham or the College of Engineering, cannot transfer any credits used for their bachelor's degree, even free electives or tech electives, toward their master's degree. They may only transfer credits from courses that were not used to fulfill requirements for a degree or certificate (verified by an Undergraduate Program Advisor). Furthermore, the transferred credits must be from graduate-level courses and Rackham must receive confirmation (from their Graduate Coordinator) that these courses were at the graduate level and required graduate-level effort.

## Feedback from Susan Montgomery and Fred Terry:

It's up to the CoE Curriculum Committee to decide whether they want to allow double dipping between supplemental studies programs or not. Both agree that they would support allowing students to double count courses, but not triple counting. If they satisfy the requirements, then they should get the certification.

## Options:

1. Keep the Double Counting Policy and the Supplemental Studies Policy as is.
2. Update the Supplemental Studies Policy - either remove the \#6 or modify the language

## Course Approval Request Form

500 S. State Street

Ann Arbor, MI 48109-1382

## Action Requested

$\square$ New Course
$\square$ Modification of Existing Course

Date of Submission: 2023-10-06
Effective Term: Fall 2024
$\square$ Deletion of Existing Course

| $\square$ | Course Offered <br> $\square$ Indefinitely <br> $\square$ One term only | RO USE ONLY <br> Date Received: <br> Date Completed: <br> Completed By: |
| :--- | :--- | :--- |

RO USE ONLY
Date Received:
Date Completed:
Completed By:

## REQUESTED LISTING

| $\square$ | Dept (Home): School of Information <br> Subject: SI <br> Catalog: 565 |  |  |  | Dept (Home): Linguistics <br> Subject: LING <br> Catalog: 702 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square$ Course is Cross-Listed with Other Departments |  |  |  | $\square$ Course is Cross-Listed with Other Departments |  |  |  |
|  | Department | Subject |  | Catalog Number | Department | Subject |  | Catalog Number |
|  | Elec Eng Com Sci - EECS -597, Linguistics - LING -702 |  |  |  | Comp Sci Eng - CSE -597, School of Information - SI-565 |  |  |  |
| $\square$ | Course Title (full title) Language and Information |  |  |  | Course Title (full title) Language and Information |  |  |  |
| $\square$ | Abbreviated Title (20 char) Language \& Info$\qquad$ |  |  |  | Abbreviated Title (20 char)$\qquad$ Language \& Info |  |  |  |
| $\square$ | Course Description (Please limit to 50 words and attach separate sheet if necessary) <br> This course introduces a body of quantitative techniques for modeling and analyzing natural language and for extracting useful information from texts. The theory includes Hidden Markov Models and the noisy channel model, information theory, supervised and unsupervised machine learning, and probabilistic context-free and context-sensitive grammars. Aspects of natural language analysis include phrasal lexicon induction, part of speech assignment, entity recognition, parsing, and statistical machine translation. |  |  |  |  |  |  |  |
| $\square$ | Full Term Credit Hours  <br> Undergraduate Min: Graduate Min: 3 <br> Undergraduate Max: Graduate Max: 3 |  |  |  | Half Term Credit Hours  <br> Undergraduate Min: Graduate Min: <br> Undergraduate Max: Graduate Max: |  |  |  |
| $\square$ | Course Credit Type <br> Rackham Graduate Student, Non-Rackham Graduate Student |  |  |  |  |  |  |  |
| $\square$ | Repeatability Course is Repeatable for Credit <br> Maximum number of repeatable credits: |  |  |  | $\square$ Course is $Y$ graded$\square$ Can be taken more than once in the same term |  |  |  |

Grading Basis
$\square$ Graded (A - E)
$\square$ Credit/No CreditSatisfactory/UnsatisfactoryPass/FailBusiness Administration
Grading

Add Consent
Department Consent
$\square$ Instructor Consent
$\square$ No Consent

Drop Consent
Department Consent
$\square$ Instructor Consent
$\square$ No Consent
$\square$ Not for Credit
$\square$ Not for Degree Credit
Degree Credit Only


SIGNATURES ARE REQUIRED FROM ALL DEPARTMENTS INVOLVED (Please Print AND Sign Name)
Contact Person: Punam Vyas Email: Vyas@umich.edu Phone: 647-1754

| CoE Curriculum <br> Committee Representative: Amir Kamil | Print: | Date: 10/6/23 |  |
| :--- | :--- | :--- | :--- |
| CoE Curriculum Committee Chair: | Print: | Date: |  |
| Home Department Chair: Acrisio Pires | Print: | Date: 10/06/23 |  |
| Cross-Listed Department Chair: Emily Mower Provost | Print: | Sally Bezuin | Date: 10/18/23 |
| Cross-Listed Department Chair: | Sally Bazuin | Print: | Date: 10/6/23 |
| Cross-Listed Department Chair: |  | Date: |  |

## Current:

## Course Description

This course introduces a body of quantitative techniques for modeling and analyzing natural language and for extracting useful information from texts. The theory includes Hidden Markov Models and the noisy channel model, information theory, supervised and unsupervised machine learning, and probabilistic context-free and context-sensitive grammars. Aspects of natural language analysis include phrasal lexicon induction, part of speech assignment, entity recognition, parsing, and statistical machine translation.

## Class Length

Full term

Contact hours (lecture):
3

Contact hours (recitation)

Contact hours (lab)

## Requested:

## Course Description

This course introduces a body of quantitative techniques for modeling and analyzing natural language and for extracting useful information from texts. The theory includes Hidden Markov Models and the noisy channel model, information theory, supervised and unsupervised machine learning, and probabilistic context-free and context-sensitive grammars. Aspects of natural language analysis include phrasal lexicon induction, part of speech assignment, entity recognition, parsing, and statistical machine translation.

Class Length
Full term

Contact hours (lecture):
3

Contact hours (recitation)

Contact hours (lab)

## Additional Info:

Submitted by:
Cross-listed dept

Describe how this course fits with the degree requirements:

## Special resources of facilities required for this course:

## Supporting statement:

The EECS department is moving most 500-level and above courses to separate CSE and ECE subject codes to free up course numbers, and to better reflect which division is the home for each course.

The Linguistics department will be home for this course.

