

BACHELOR'S TO ELECTRICAL AND COMPUTER ENGINEERING, M.S. ACCELERATED PROGRAM

The Electrical and Computer Engineering Accelerated Bachelor to Master of Science program at Saint Louis University allows ECE students, who hold exceptional academic records and are ready for advancing their knowledge through graduate level courses, to earn both a Bachelor of Science and a Master of Science degree in about five years. The demand for graduates with an M.S. degree in ECE is steadily increasing, and SLU's accelerated program offers a fast-track pathway to help students meet this demand in fewer semesters.

The actual time for obtaining the degree is determined by the individual student's objectives, needs and diligence. Students should work with their advisors, the earlier in their college career the better, to make sure they are on track for optimal acceleration.

For additional information, see the catalog entries for the following programs:

Computer Engineering, B.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/computer-electrical/computer-engineering-bs/>)

Electrical Engineering, B.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/computer-electrical/electrical-engineering-bs/>)

Electrical and Computer Engineering, M.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/computer-electrical/ece-ms/>)

Requirements

Admission Requirements

The following process is applied in reviewing credentials for admission to ECE ABMS Program:

- SLU ECE students with cumulative GPA of 3.0 or better can initiate application to ABMS program as early as in their 4th semester (Sophomore 2nd semester) and no later than the end of 6th semester (Junior 2nd semester) at ECE by contacting the ECE MS Program Coordinator. Students can be admitted to the program no earlier than the beginning of the 6th semester and no later than the end of the 7th semester.
- Students must discuss with their undergraduate academic advisor and the ECE MS Program Coordinator to develop a coursework load plan.
- It is the responsibility of the student, who is interested in pursuing accelerated research (with thesis) or project (non-thesis but project report) track, to find an advisor, work with the advisor to develop research or project plan and inform the ECE MS Program Coordinator with the plan.
- Students must complete and submit Application to the Graduate Program <https://gradapply.slu.edu/apply/> and choose the semester which should be considered as their start of their graduate study and notify the ECE MS program coordinator.

- ECE MS admission committee will review the application and notify the student about the decision.

The application for ABMS should include the following information

- *A well-thought-out study plan.* The application form which shows the list of double counted courses (up to 15 credits), list of graduate level courses (other than the double counted courses) that the student plans to take, and the track choice (Coursework-only track, project track, or research track). Students planning project or research tracks must also submit a project proposal form that states the commitment of the student and the advisor to the project or research and highlights the title, scope, timeline, and resources available for the successful execution of the project or the research that will constitute the focus of the graduate degree.
- *A financial plan.* All applicants admitted to AMS program are expected to fund themselves for the period between the conferral of the BS and MS degrees. The financial plan must address how the tuition, fees, health insurance, and monthly living expenses will be covered. Depending on the research needs of the department, limited funding may be available to selective applicants in the form of teaching assistantship (TA) for up to a maximum of two semesters. Funding may also be possible through external research grants of individual faculty member, typically for students pursuing project and research thesis tracks. Students must communicate directly with individual faculty.
- Statement of Purpose

Program Requirements

- A maximum of 15 graduate credits taken during the accelerated program can be counted toward both the bachelor's and the master's degree. After the double counted 15 credits, the student in the ABMS program needs to complete only 15 credit hours from 5000 level courses to earn ECE MS degree.
- To double count a course, the student must have obtained a grade of B or more. If the grade is below a B, it can still count towards the BS degree. The remaining MS graduate courses must be completed after finishing the BS degree.
- For 5000 level courses, other than the double counted courses, a grade of C or higher is required to be counted towards the MS degree.
- Once the maximum of 15 credit hours of graduate coursework has been completed, a student in the ABMS program cannot continue taking graduate level courses until they have completed their undergraduate degree requirements.
- Project and Thesis Research track students are advised to begin working with a faculty member at the time of application to expedite degree completion.

Included courses are below:

Computer Engineering

Undergraduate Program Requirement	Met by Graduate Course
ECE 4245X	ECE 5245X
6 credits of ECE or CSCI Electives	Foundational Courses or ECE Technical Electives
3 credits Technical Elective	Foundational Courses or ECE Technical Electives

Electrical Engineering

Undergraduate Program Requirement	Met by Graduate Course
9 credits of ECE Electives	Foundational Courses or ECE Technical Electives
6 credits of Technical Electives	Foundational Courses or ECE Technical Electives

Roadmap

This roadmap is just one example of a semester-by-semester plan of study for this program. There are other plans students can and do take. The plan of study for each particular student is established in consultation with each student's academic advisor; *this roadmap does not replace academic advising appointments.*

Roadmap notes:

- This Roadmap assumes full-time enrollment unless otherwise noted.
- Courses/Milestones marked with an "!" are critical and must be completed in the semester listed in the Roadmap to ensure a timely graduation.
- Course availability and sequencing are subject to change.

Course	Title	Credits
Year Four		
Fall		
ECE Foundational Course or Technical Electives		3
ECE graduate Technical Electives		6
ECE 5000	Seminars	0
Credits		9
Spring		
ECE graduate Technical Electives		3
ECE Foundational Course or Technical Electives		3
ECE 5000	Seminars	0
Credits		6
Year Five		
Fall		
ECE 5001	Practices in ECE	3
ECE Foundational Course or Technical Electives		3
ECE graduate Technical Elective		3
ECE 5000	Seminars	0
Credits		9
Spring		
ECE graduate Technical Electives		6
ECE 5000	Seminars	0
Credits		6
Total Credits		30

Madrid

The electrical and computer engineering accelerated program will provide an opportunity to students in SLU-Madrid to advance their technical knowledge and prepare them for industry and research jobs. Students can start the Bachelor of Science in Computer Engineering in Madrid and then complete the Master of Science in St. Louis.

Contact Us

For more information, please email ece@slu.edu or call 314-977-8292.