Blended BS/MS in Electrical Engineering Program Handbook

Department of Electrical Engineering
California Polytechnic State University, San Luis Obispo

Academic Year 2025–2026
Revision 1.1

Contents

This handbook is intended for students who are pursuing the graduate degree under the Blended BS/MS (BMS) Program. Students who are admitted directly to the MSEE program should consult the separate MSEE program handbook for the requirements and procedures specific to their pathway.

The timelines, deadlines, and academic procedures specified in this handbook are based on Cal Poly's current quarter system. These requirements may be subject to change following the university's planned transition to a semester academic year.

1 Introduction

The *Blended Bachelor's and Master's (BMS)* program in Electrical Engineering provides academically excellent upper-division students with an accelerated pathway to complete Master of Science in Electrical Engineering (MSEE) graduate studies concurrently with completion of the Bachelor of Science degree. This integrated approach enables qualified students to earn both degrees simultaneously upon completion of all requirements.

Key features of the BMS program include:

- *Accelerated Timeline*: Reduced time to MSEE graduation compared to completing the degrees as separate sequential programs
- *Concurrent Enrollment*: Ability to enroll simultaneously in courses that apply to the BS degree and courses that apply to the MS degree
- *Integrated Academic Planning*: Coordinated advising that optimizes course sequencing across both degree programs
- *Streamlined Transition*: Direct progression from undergraduate to graduate status without external application processes, application fees, GRE exam requirements, or extensive recommendation letter submissions.

1.1 Program Tracks

Two distinct tracks with different culminating experiences are available for the BMS program in Electrical Engineering:

i. ***Course-Based Track:*** Requires advanced coursework with a comprehensive *Exam* as the culminating experience. This track emphasizes broad technical knowledge across multiple areas of electrical engineering and is ideal for students pursuing professional engineering careers in industry who desire comprehensive exposure to diverse advanced technical domains.

ii. ***Thesis-Based Track:*** Requires coursework and completion of a formal research *Thesis* under the direction of an EE or CPE faculty member, followed by a successful oral defense. This track provides intensive research experience and deep specialization in a specific technical area, which makes it well-suited for students considering doctoral studies, research-oriented careers, or those seeking focused expertise in their field of interest.

Students should select the track that best aligns with their career objectives and academic interests. Admission to the Thesis-Based track requires identifying a research advisor and thesis topic by the time of application, as will be detailed in Section 2.

1.2 Senior Project Requirement

All BMS students must complete the Senior Project as a separate undergraduate degree requirement. In addition, for students pursuing the Thesis-based track, successful completion of the Senior Project serves as a prerequisite for MS Theses. Note that the senior project and graduate thesis must have distinct objectives, methodologies, and deliverables, though they may be thematically related.

1.3 Academic Resources and Policies

Students are required to familiarize themselves with the current Cal Poly Academic Catalog, which contains essential information regarding graduate studies in the Electrical Engineering Department and the general Blended Programs. The Cal Poly Graduate Education Handbook, available through the Graduate Education website, provide additional important guidance for all graduate students.

This handbook serves as a departmental supplement to the university catalog and Graduate Education policies. Students are responsible for understanding and complying with all applicable university policies, procedures, and requirements as outlined in official Cal Poly publications.

2 Admission Requirements and Eligibility

2.1 Academic Prerequisites

Electrical Engineering and Computer Engineering students who have completed their junior-level coursework are eligible to apply for the BMS program in Electrical Engineering. All applicants must meet the following minimum requirements:

- Minimum cumulative Cal Poly grade point average of 3.2 (CPSLO Total). (*Note:* Applications must report the "CPSLO Total" GPA, *not* the "Higher Ed Total" GPA.)
- Completion of all EE/CPE 300-level courses (including those in progress during the quarter of application)

Students with exceptional circumstances or strong faculty support may be considered for admission even if they do not meet all standard requirements. Such applications will be evaluated on a case-by-case basis by the Graduate Committee.

2.2 Application Materials

All applicants must submit the following materials through the designated *BMS Program Application Form* through Microsoft Forms (see Section 3). Application requirements vary depending on the selected track, with common materials required for all applicants and additional track-specific components.

Required for All Tracks:

- Unofficial academic transcript
- Statement of Purpose outlining academic and professional objectives
- Current resume
- Completed online application form

Thesis-Based Track Additional Requirements:

- One letter of recommendation from the proposed thesis advisor

- One-page research memo co-developed and signed by the proposed thesis advisor, including the student name, draft thesis title, description of the research plan, and advisor name, date, and signature

Course-Based Track Additional Requirements:

- Two letters of recommendation, with at least one from instructors of 300-level and/or 400-level courses

2.3 Letter of Recommendation Process

BMS applicants must follow a two-step process for obtaining letters of recommendation:

i. *Faculty Approval*: Obtain verbal or written approval from faculty members to serve as recommenders

ii. *Official Request*: Submit the Letter of Recommendation Request Form through Microsoft Forms, which will automatically send official email requests to faculty with links to the recommendation submission system

All letters of recommendation must be submitted by faculty through the designated system by the application deadline.

2.4 Application Deadlines and Review Process

The BMS program has three application deadlines, which fall on the Friday of the 8th week of each quarter at 5:00 PM. The Graduate Committee reviews applications and makes admission recommendations within 2-3 weeks of each deadline.

Students typically apply between the end of their junior year and enrollment in senior project courses (EE 460 or CPE 461).

Students may not apply to the BMS program when nearing 192 degree-applicable units that fulfill requirements of their BSEE degree.

3 Application Process

3.1 Application Platform

All applications for the Blended Bachelor's and Master's (BMS) program are submitted electronically through Microsoft Forms. Current application forms and detailed instructions are available on the Electrical Engineering Department website at https://ee.calpoly.edu/academics/bms-honors.

3.2 Application Components

The BMS application process consists of two primary components:

i. *Letter of Recommendation Request Form*: Used to initiate the faculty recommendation process

ii. *BMS Program Application Form*: Contains all required application materials and documentation

The BMS program application process offers several advantages compared to traditional graduate school applications, including no Graduate Record Examination (GRE) required, no official transcripts required (unofficial transcripts sufficient), no application fees, no external application through Cal State Apply system, and a streamlined internal review process.

3.3 Submission Process

Step 1: Letter of Recommendation Request

i. Obtain approval from faculty members to serve as recommenders

ii. Complete the Letter of Recommendation Request Form

iii. Faculty will receive automated email notifications with submission links

iv. Ensure all letters of recommendation are submitted by the application deadline. Students will receive automatic email notifications when faculty submit letters of recommendation on their behalf

Step 2: Application Submission

i. Complete the BMS Program Application Form through Microsoft Forms

ii. Upload all required documents (unofficial transcript, statement of purpose, resume)

iii. For Thesis-Based track: Include signed research memo from proposed advisor

iv. Submit application by the deadline listed in Section 2.4

All application materials, including letters of recommendation, must be submitted by the published application deadline. Late or incomplete applications will not be considered for the current review cycle but may be resubmitted for subsequent deadlines.

Questions regarding the application process should be directed to the Graduate Coordinator.

4 Admission Process and Change of Academic Status

4.1 Admission Decisions

Admission to the BMS program is determined by the Electrical Engineering Graduate Committee following comprehensive review of all application materials. Applicants will be notified of admission decisions before the start of the quarter following the application deadline.

Upon admission recommendation by the EE department, students will be notified of their assigned MS track (Course-Based or Thesis-Based) as specified in their application and confirmed during the review process.

Students must submit the Blended Pathway Program Application Approval form to the Graduate Education office as soon as possible after admission (no later than Week 8 of the quarter following admission) to accept the admission and confirm their intent to transition to graduate standing. Note that this form submission represents an intent to change degree objectives and is *not* an official switch to graduate status.

4.2 Undergraduate Status Maintenance

Upon admission to the BMS program, students maintain their undergraduate status until they submit the *Blended Pathway Postbaccalaureate Change of Objective (BPPBCO)* form. During this period, students continue to follow undergraduate policies and procedures while planning their integrated degree pathway and meeting transition requirements.

4.3 Transition to Graduate Status

Prerequisites for Transition: Before submitting the BPPBCO form, students must complete several critical requirements. All lower-division bachelor's requirements, including general education courses, must be completed with final grades earned.

The Graduate Writing Requirement (GWR) must also be completed with a final grade; in-progress coursework does not satisfy this requirement.

Timing of BPPBCO Submission: Students should submit the BPPBCO form during the quarter in which they are earning 192 degree-applicable units (counting toward the combined bachelor's and master's degrees). Importantly, students should not have completed all bachelor's degree requirements at the time of BPPBCO submission. Strategic planning involves leaving some upper-division Area C or D general education courses, and a senior project coursework, to be completed after transitioning to graduate status.

Transition Process: The completed *Blended Pathway Postbaccalaureate Change of Objective* form must be submitted by the end of the 3rd week of the quarter in which the student reaches 192 degree-applicable units. The process begins with completion of the official Blended Pathway Postbaccalaureate Change of Objective E-form, followed by obtaining signature approval from the Graduate Coordinator, Department Chair, and College of Engineering Associate Dean of Graduate Programs.

The status change takes effect in the quarter following BPPBCO submission, marking the student's first term at graduate standing. Students must be matriculated for at least two academic quarters in BMS Graduate status before receiving their MS degree.

Transition Timeline Example: A typical transition timeline follows this pattern:

- Fall 2025: student completes final lower-division course and GWR
- Winter 2026: student enrolls to earn at least 192 units and submits BPPBCO during week 2
- Spring 2026: student is at the first term of graduate standing

4.4 Status Change Implications

Transitioning to graduate status provides several advantages for BMS students, including: i) priority registration for graduate-level (500-series) courses, ii) qualification for university employment at the graduate pay scale, iii) eligibility for graduate student financial support programs, and iv) access to specialized graduate student resources and facilities that support advanced study and research activities.

The transition to graduate status also involves important considerations that students should evaluate carefully, including: i) increased tuition rates compared to undergraduate programs, ii) loss of access to some financial support programs that are exclusively available to undergraduate students, iii) loss of access to progress-to-degree information on the Cal Poly portal, and iv) priority registration privileges that apply only to graduate-level courses and do not extend to undergraduate course registration.

Students should work closely with their academic advisor and the Graduate Coordinator to plan the optimal timing for status transition, considering both academic progression and financial implications. Early transition to graduate status is generally recommended as soon as the minimum unit requirement is achieved to optimize academic planning and maximize the benefits of graduate standing.

5 General Academic Guidelines

5.1 Academic Advising

The Electrical Engineering Department designates a faculty member to serve as the *Graduate Coordinator*, who functions as the official academic advisor for all MS students in the program. While students are encouraged to seek guidance from any faculty member, the Graduate Coordinator must approve and sign all required academic forms and documents.

Students pursuing the thesis option should identify and engage a thesis advisor as early as possible in their graduate program. The thesis advisor provides specialized guidance on coursework selection to support thesis research and offers expertise in the student's chosen area of specialization.

5.2 Registration and Continuous Enrollment

General Enrollment Requirements

Graduate students must maintain continuous enrollment at Cal Poly from the time of first enrollment in a graduate program until completion of the degree. Continuous enrollment is defined as being enrolled during Fall, Winter, and Spring quarters each year. A student may be required to enroll in the Summer quarter if Summer is the quarter of degree completion, as all graduate students must be enrolled in the quarter in which they graduate.

Approved Leaves of Absence

Students experiencing circumstances requiring temporary interruption of studies must contact the Graduate Coordinator prior to taking leave. University-approved leaves of absence, including Med-

ical Leave and Planned Educational Leave as defined in the Cal Poly Catalog, exempt students from continuous enrollment requirements during the approved leave period. Students cannot file Leaves of Absence for the first term they have reached graduate standing.

Continuous Enrollment Maintenance

Students maintain continuous enrollment through either:

- Regular enrollment in degree-applicable coursework or thesis units
- Registration in *GS 597 Continued Graduate Study* during quarters when not otherwise enrolled

GS 597 is a one-unit, credit/no-credit (CR/NC) course administered through Cal Poly Extended Education to minimize the cost. Units earned in GS 597 *do not* count toward degree requirements but fulfill continuous enrollment obligations.

Consequences of Enrollment Gaps

Students who fail to maintain continuous enrollment will not be permitted to graduate until all non-enrollment periods are addressed through retroactive registration in GS 597, with payment required for each quarter of non-enrollment.

5.3 Graduation Writing Requirement

BMS students must fulfill the Graduation Writing Requirement (GWR) before the term in which they submit their *Blended Pathway Postbaccalaureate Change of Objective* form. The GWR must be completed with a final grade before that term; in-progress coursework does not satisfy this requirement.

Detailed information regarding GWR fulfillment requirements is available on the Office of Writing and Learning website.

5.4 Formal Study Plan

The Formal Study Plans, specifically the *Working Formal Study Plan (WFSP)* and the *Final Formal Study Plan (FFSP)*, document student's intended coursework to satisfy all MSEE degree requirements.

- Students must submit a *"Working Formal Study Plan and Advancement to Candidacy"* form to the Graduate Coordinator within the first five weeks of their first quarter of enrollment, outlining their planned coursework and culminating experience option: "Exam" for Course-Based or "Thesis" for Thesis-Based track.
- The *"Final Formal Study Plan"* must be submitted within the first five weeks of the intended graduation quarter.

The E-Forms for study plans are available on the Graduate Education website:
https://grad.calpoly.edu/checklist-forms/steps-to-graduation.html

All study plans require approval by the Graduate Coordinator, followed by endorsement from the College of Engineering and the Graduate Education Office.

- Thesis-based students should list their *thesis advisor* in the "Advisor" field for approval.
- Course-based students should list the *Graduate Coordinator* as the "Advisor" for approval.

Students should consult the Cal Poly Catalog, this handbook, and departmental course schedules when developing their study plan. Consultation with faculty members and the Graduate Coordinator is strongly recommended to ensure academic coherence and alignment with career objectives.

The *Formal Study Plan* must satisfy the following requirements:

- **Total Units**: Minimum of 45 quarter units
- **Required Coursework**:
  - EE 563 Graduate Seminar: 3 units (1 unit per quarter for three quarters)
  - For *Thesis-based MS* track: 9 units of EE 599 Design Project-Thesis
- **Course Level Distribution**:
  - Minimum 28 units from graduate 500-level EE courses

    Considering the required coursework listed above, this translates to:
    - *Thesis-based track:* minimum 16 additional units in 500-level EE courses beyond EE 563 and thesis
    - *Course-based track:* minimum 25 additional units from 500-level EE courses beyond EE 563
  - Maximum 17 units of technical electives from 400-level (advanced undergraduate) or higher-level courses from EE or related disciplines (Computer Science, other Engineering fields, Mathematics, Physics). Computer Engineering (CPE) courses are considered equivalent to Electrical Engineering courses and are not subject to this limitation.
- **Residency and Transfer Credit Requirements**: Minimum 33 units completed at Cal Poly. Up to 12 quarter units (8 semester units) from other institutions may be accepted as part of the Study Plan, provided the courses were not used toward the completion of another degree and are approved by the graduate program.
- **Double Counting Policy**: The Electrical Engineering BMS program does not permit double counting of courses between Bachelor of Science and Master of Science degree requirements. Each course may only be applied toward the requirements of one degree program. Students must ensure that all courses listed on their undergraduate degree requirements are separate and distinct from those applied to their graduate degree requirements.
- **Additional Restrictions**:
  - Credit/no-credit courses (except EE 563) cannot be used in the Formal Study Plan to fulfill degree requirements, but may be taken as prerequisites or as supplemental coursework.

- Cooperative Education courses (EE 594, 595) maintain enrollment but do not count toward the 45-unit requirement for the MS degree
- Study plan must demonstrate academic coherence with appropriate breadth and depth in a chosen area of specialization

5.5 Academic Performance Standards

Students must maintain a minimum GPA of 3.00 in all coursework listed on the *Formal Study Plan*. Failure to maintain this minimum cumulative GPA will prevent degree completion and graduation.

Courses completed with grades of D+ or lower do not satisfy degree requirements and must be repeated. When courses are repeated, both the original and repeat grades are included in GPA calculations, though only the satisfactory grade fulfills the degree requirement.

5.6 Application for Graduation

Students must submit an *Application for Graduation* E-Form one quarter prior to their intended graduation quarter (within the first five weeks). The form is available at:
https://grad.calpoly.edu/checklist-forms/steps-to-graduation.html

All degree requirements must be completed within seven years of first enrollment at graduate status.

5.7 Supervised Independent Study

EE 599 (Design Project-Thesis) and EE 500 (Individual Study) require faculty supervision and prior approval of study topics. Students must obtain supervisory course approval forms and registration permissions from the EE Department Office before enrollment. Required permission electronic forms are available online: EE Thesis Permission Form and EE 500 Permission Form.

Note that EE 500 Individual Study is generally limited to 4 units *maximum* on any Formal Study Plan. Graduate students must enroll in EE 500 rather than the undergraduate equivalent EE 400 for independent study credit.

6 Thesis-Based MS Track

6.1 Overview and Requirements

The thesis track represents one of two culminating experience options available to Master of Science in Electrical Engineering students. The thesis option provides students with intensive research experience and prepares them for doctoral studies or research-oriented professional careers.

According to Title 5 of the California Code of Regulations, a thesis constitutes "the written product of a systematic study of a significant problem". A satisfactory thesis must:

- It identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation.

- The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation.
- Normally, an oral defense of the thesis is required.

6.2 Thesis Advisor Selection and Responsibilities

The thesis advisor must be a permanent, full-time faculty member of the Electrical Engineering or Computer Engineering Departments. Students interested in pursuing the Thesis track should consult the departmental Faculty Interest list (available via https://ee.calpoly.edu/department-directory) to identify potential advisors with expertise aligned with their research interests. Students are strongly recommended to identify a research topic and thesis advisor during the first quarter in the program to benefit from early guidance on research project development and coursework selection.

The thesis advisor provides comprehensive guidance throughout the research process:

- Assist with defining the thesis project, clarifying objectives and deliverables.
- Suggest appropriate preparation for the research such as relevant coursework, and guide the literature review.
- Provide technical advice to address challenges, roadblocks, and dead ends inherent in research projects.
- Review thesis drafts and provide feedback on required revisions.
- Determine the appropriate timing and unit load for EE 599 registration.
- Recommend faculty members with the requisite technical expertise to serve on the Thesis Committee.
- Certify readiness for the oral defense and assist with preparations (e.g., review of presentation materials).

Regular meetings with the thesis advisor are expected to ensure adequate progress monitoring and timely resolution of research challenges.

6.3 Thesis Unit Registration

Prior to enrollment in EE 599 Design Project-Thesis, students must secure advisor approval and obtain electronic signatures on the required EE Thesis Permission Form. The thesis component comprises 9 total units, typically distributed as 2, 2, 5 units across three consecutive quarters, though alternative distributions may be approved by the thesis advisor based on project requirements.

Students must not register for thesis units unless they have:

- A clearly defined research scope and methodology.
- A confirmed faculty member to serve as thesis advisor.

- Adequate resources (financial, equipment, and facilities) to support completion of the project.

Students whose thesis work extends beyond their final quarter of EE 599 enrollment will receive an "RP" (Report Pending) grade. Students have up to one year to complete and defend their thesis before the RP grade converts to a Failed grade ("F"). During intervening quarters, students must maintain continuous enrollment through GS 597 registration for at least one unit per quarter (see Section 5.2).

6.4 Thesis Committee

Students must assemble a thesis committee of at least three faculty members (including the thesis advisor) prior to thesis defense. The thesis advisor serves as committee chair, with additional members selected in consultation with the advisor.

Departmental representation requirements are as follows:

- Minimum two committee members from the Electrical Engineering Department;
- One member may represent a related discipline (Mathematics, Computer Science, Physics, other Engineering fields) when appropriate to the research topic;
- When the thesis advisor is a Computer Engineering faculty member, both additional committee members must be from the Electrical Engineering Department.

Thesis committee members are expected to:

- Participate in thesis proposal presentations and provide constructive feedback
- Conduct thorough review of the thesis document prior to oral defense
- Develop appropriate questions for the oral examination
- Provide detailed feedback on technical content, exposition quality, and formatting
- Evaluate the overall merit of the research, thesis document, and oral defense performance
- Determine thesis approval status: approved, conditionally approved pending specified revisions, or rejected

Committee members with substantive concerns regarding thesis content or research quality should communicate these issues to the thesis advisor prior to the scheduled defense to allow for appropriate remediation or rescheduling.

6.5 Thesis Proposal Presentation

The thesis proposal presentation enables students to demonstrate the quality, feasibility, and academic merit of their proposed research while receiving constructive feedback from committee members. This presentation also allows committee members to assess whether the proposed research aligns sufficiently with their expertise to enable effective participation.

The presentation typically occurs during committee formation, no later than one quarter before the thesis defense when filing the *Application for Graduation* E-Form. While thesis advisors may exercise discretion regarding the thesis proposal requirement, committee members may condition their participation based on the proposal presentation.

Presentation Format and Content

Students are responsible for scheduling the presentation at a time convenient for all committee members. The presentation session is scheduled for 50 minutes, with a 20-minute overview of the proposed research addressing:

- Significance and motivation of the proposed study
- Research scope, objectives, and anticipated contributions
- Review of relevant literature and previous research findings
- Preliminary work completed and initial observations
- Specific research questions and hypotheses to be investigated
- Project timeline with anticipated completion dates for major milestones
- Bibliography of reviewed references

The proposal presentation is followed by a 30-minute committee discussion during which members provide questions, suggestions, and guidance.

6.6 Thesis Oral Defense

The oral defense must be completed prior to final thesis document submission. All thesis committee members must attend the defense. The Electrical Engineering Department maintains an open-door policy for the public portion of the defense, welcoming attendance by interested faculty and students.

Students coordinate scheduling, room reservations, and announcements through the EE Department Office. Defense announcements must be distributed via email and posted flyers at least one week in advance.

The oral defense is typically scheduled for *two hours* with the following components:

i. Thesis Oral Presentation: Student presents thesis research (40–50 minutes, open to faculty and students)

ii. Public Question Period: Questions from attending faculty, students, and committee members (10–15 minutes)

iii. Closed Committee Examination: Private questioning session with thesis committee and thesis student only (20–45 minutes)

iv. Committee Deliberation: Committee discussion and decision (10–30 minutes, committee only)

6.7 Thesis Document Preparation and Review

Students must adhere to the *Master's Thesis Formatting Guidelines* available through the Graduate Education website at https://grad.calpoly.edu/masters-thesis/masters-thesis.html. Official thesis templates are provided to ensure compliance with university standards.

Students are strongly encouraged to develop the thesis document incrementally throughout the research process rather than deferring writing until project completion. Thesis advisors may require draft submissions as part of EE 599 grade evaluation in early quarters.

Students must provide a complete thesis draft to their advisor *at least four weeks* before the intended defense date. This timeline allows for thorough advisor review and incorporation of recommended revisions before distribution to committee members.

Following advisor feedback and approval, students must provide a revised, complete thesis document to all committee members *at least two weeks* before the scheduled oral defense.

6.8 Thesis Approval Process

Final thesis approval involves two distinct components:

i. *Content Approval*: Thesis committee evaluation of technical content, methodology, and conclusions

ii. *Format Approval*: Graduate Education Office verification of compliance with university formatting standards

Following committee review and oral defense, students typically receive requests from the committee members for document revisions addressing content clarification, technical accuracy, exposition quality, or editorial corrections. The committee may require additional review of revised materials or delegate final approval authority to the thesis advisor.

Upon thesis committee approval, students must obtain committee signatures on the Master's Culminating Experience Approval E-form by the final day of their intended graduation quarter. Complete submission procedures are detailed in the *Master's Thesis Submission Process* documentation available through the Graduate Education website:
https://grad.calpoly.edu/masters-thesis/masters-thesis.html

7 Course-Based MS Track

The course-based track provides an alternative pathway to the MSEE degree with a *comprehensive exam* serving as the culminating experience. This examination assesses students' mastery of the core knowledge and technical competencies acquired through their graduate coursework.

7.1 Comprehensive Exam Format and Scheduling

Students planning to complete the comprehensive examination must notify the Graduate Coordinator of their intent during the quarter preceding their planned examination date. The examination is typically administered during the student's final quarter of residency.

The current comprehensive exam format requires students to select *three 500-level courses* from their completed coursework. All three courses must be from 500-level EE or CPE courses, with a *minimum* of two courses from EE. Each course instructor conducts an individual assessment of the student's mastery of that course material. Instructors have flexibility in determining their evaluation method, which may include written examinations, oral examinations, or project-based assessments.

The Graduate Coordinator will provide specific information regarding examination logistics and coordination with course instructors upon notification of the student's intent to pursue this option.

7.2 Academic Requirements

Students pursuing the Course-Based MS track must clearly indicate selection of the comprehensive "Exam" option on both their *Working Formal Study Plan* and *Final Formal Study Plan* documents. The study plan must comprise a minimum of 45 units of degree-applicable coursework, excluding any thesis units.

Students must successfully complete all 45 units specified in their Formal Study Plan by the conclusion of the quarter in which they plan to take the Comprehensive Exam.

Students must meet the following academic standing requirements to be eligible for the comprehensive examination:

- Maintenance of good academic standing (not on academic probation)
- Achievement of a minimum 3.0 cumulative grade point average in all coursework listed on the Formal Study Plan

Students on academic probation or with a cumulative GPA below 3.0 in their graduate coursework will not be permitted to attempt the comprehensive exam until academic deficiencies are resolved and good standing is restored.

8 Process to Award Both BS and MS Degrees

8.1 Dual Degree Conferral Process

Upon successful completion of all requirements for both the BS and MS degrees, the Office of the Registrar follows a specific sequence to award both degrees simultaneously. The process begins with verification that all undergraduate and graduate degree requirements have been satisfied.

Once verification is complete, the undergraduate matriculation record is reopened as a secondary degree objective, and the Bachelor of Science degree is officially posted to the academic record. Subsequently, the graduate matriculation is finalized as the primary degree objective, and the Master of Science degree is officially posted to the academic record.

Both degrees are awarded simultaneously and recognized together at the graduation ceremony, reflecting the integrated nature of the BMS program completion.

Students must complete all requirements for both degrees within the seven-year time limit established for graduate degree completion. The conferral date for both degrees will reflect the term in which all final requirements are satisfied.

8.2 Contingency Procedures

If a student completes all undergraduate degree requirements but fails to complete the Master's degree requirements, alternative arrangements can be made to ensure the student receives their Bachelor's degree. The undergraduate matriculation can be reopened to grant the BS degree independently of the Master's program.

To initiate this process, the student must submit a Postbaccalaureate Change of Objective (PBCO) form to change their degree objective back to the undergraduate program. Once approved, the Bachelor's degree will be awarded based on completion of undergraduate requirements.

Students who receive their Bachelor's degree through this process may subsequently reapply to complete Master's degree requirements through appropriate university procedures if they choose to pursue graduate studies at a later time.

8.3 Commencement Participation

BMS students who complete both degrees are eligible to participate in the commencement ceremony corresponding to their graduation term. Students should submit their Application for Graduation according to standard university deadlines to ensure inclusion in commencement planning and materials.

9 Department Facilities and Resources Available to BMS EE Students

Graduate students engaged in thesis research and special projects may be assigned dedicated workspace within EE Department laboratories. Workspace allocation is determined based on research requirements, project scope, and laboratory capacity.

Students participating in sponsored research projects are typically assigned workspace in facilities designated for their specific project. Research activities may be conducted in various locations including Advanced Technology Laboratories (ATL) research facility, Bonderson Building research areas, or specialized departmental laboratories aligned with project requirements.

All BMS Electrical Engineering students have access to the EE Graduate Lab (Room 20-121). Teaching Associates have priority for office hours and lab preparation. To request lab and key access, submit the Grad Lab Access Request Form for access authorization and key privileges.

Graduate students may have access to additional departmental resources and specialized equipment based on their research needs and thesis requirements. Students should consult with their thesis advisor and the Graduate Coordinator regarding access to specific facilities and equipment necessary for their research projects.

10 Financial Assistance and Support Opportunities

10.1 Teaching Associate Positions

The Electrical Engineering Department offers paid Teaching Associate (TA) positions for qualified graduate students to serve as instructors for selected undergraduate laboratory courses. These

positions typically involve instruction of introductory circuits and electronics laboratories for non-major students.

Teaching Associate appointments are limited to students demonstrating satisfactory academic performance and adequate progress toward degree completion. Students may teach a maximum of one laboratory section per quarter.

To be considered for a Teaching Associate position, applicants must meet the following minimum academic standards:

i. A minimum *B average* in undergraduate circuits lecture coursework and in undergraduate electronics lecture coursework.
ii. A minimum *B+ average* in undergraduate circuits laboratory coursework and in undergraduate electronics laboratory coursework.

Continued appointment as a Teaching Associate requires:

i. Earning a minimum 3.3 GPA during the teaching quarter
ii. Written confirmation from thesis advisor (for thesis-track students) documenting satisfactory progress toward MS thesis

Applications for Teaching Associate positions should be submitted to the Electrical Engineering Department Office.

10.2 Research Assistantships

Faculty-sponsored research projects frequently provide Research Assistant (RA) opportunities for graduate students. These positions may include stipend support, particularly for students whose thesis research aligns with sponsored project objectives.

Students interested in research assistantship opportunities should inquire with the Electrical Engineering Department Office and individual faculty members regarding current availability.

10.3 Grader and Laboratory Assistant Positions

Hourly wage positions for graders and laboratory assistants are typically available each quarter (excluding summer). Position announcements are posted by the department at the beginning of each quarter, with selection made by individual course instructors.

These positions are available to both graduate students and advanced undergraduates; therefore, employment is not guaranteed each quarter. Work hour requirements vary by position and are determined by the hiring faculty member.

10.4 External Financial Support

Current and prospective graduate students may apply for financial aid and Cal Poly scholarships through the Cal Poly Financial Aid Office. Application procedures and deadlines are available through the Financial Aid website: https://www.calpoly.edu/financial-aid

Furthermore, the Cal Poly Graduate Education Office administers several financial support programs, including: Graduate Teaching and Graduate Assistant programs; Resident and Non-resident Tuition Waiver programs; Graduate Equity Fellowship Program; and Additional fellowship and scholarship opportunities. Comprehensive information regarding these programs, including application procedures and eligibility requirements, is available at: https://grad.calpoly.edu/resources/financial-opportunities/financial-opportunities.html.

11 Academic Progress Checklist

Students are responsible for initiation, completion, and submission of all required academic forms according to established deadlines. Failure to complete and submit forms at the appropriate times may result in delays to program completion and degree conferral.

All required forms are available for download from the Graduate Education website at: https://grad.calpoly.edu/checklist-forms/steps-to-graduation.html

Required Milestones and Deadlines:

Admission Phase:

→ Review program track options (Course-Based vs. Thesis-Based), admission requirements, and application process (see Sections 1–3 of this handbook)

→ Obtain faculty approval for letters of recommendation

→ Submit Letter of Recommendation Request Form

→ Complete and submit BMS Program Application Form with all required materials by the deadline

→ Ensure all letters of recommendation are submitted by recommenders through the system by the deadline

Admission Acceptance Phase:

→ Upon admission recommendation by the EE department, students must submit the Blended Pathway Program Application Approval form to Graduate Education as soon as possible after admission, but no later than Week 8 of the quarter following admission.

Status Transition Phase:

→ By Week 3 of the quarter earning 192 degree-applicable units (counting towards the combined bachelor's and master's degree, but not be completed with bachelor's requirements), submit the Blended Pathway Postbaccalaureate Change of Objective (BPPBCO) E-form to transition to graduate status for the next quarter. The form must be submitted within one year of acceptance; otherwise the admission is void.

Graduate Phase:

→ ***First quarter:*** Submit the Working Formal Study Plan and Advancement to Candidacy form during Weeks 1–5

→ ***For the thesis-based track:*** Present the thesis proposal to the thesis committee at least one quarter before the thesis defense (this presentation is not mandatory, but is recommended and subject to the discretion of the advisor and committee)

→ ***One quarter prior to graduation:*** Submit the Application for Graduation form during Weeks 1–5

→ ***Final quarter:*** Submit the Final Formal Study Plan within the first five weeks of the graduation quarter

→ ***Final quarter:*** Submit the Master's Culminating Experience Approval form upon successful completion of thesis defense or comprehensive exam (due by the last day of the term of completion)