

A GUIDE FOR MS-CES STUDENTS

(prepared in FAQ format)

This guide, prepared in ‘frequently asked questions (FAQ)’ format, will help an MSCES student understand various steps involved in going through the MSCES Program from the beginning (enrollment in the Program) to end (graduation). If a student has questions which are not addressed by this guide, he/she should contact the Program Coordinator or Program Director to get answers and appropriate guidance. Various issues such as admission requirements, degree requirements, gpa requirements, etc, are not covered by this guide. Most of those details can be found at the program’s website at www.sonoma.edu/scitech/msces.

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Q1: WHERE CAN I GET INFORMATION ABOUT GENERAL ACADEMIC RULES AND REGULATIONS PERTAINING TO GRADUATE STUDIES?

A1: Three sources:

1. Post Baccalaureate Degrees section and section on the desired graduate degree program in the SSU catalog.
2. Website of the desired graduate degree program.
3. The Graduate Studies Office in Stevenson 1041 and its website.

Q2: WHAT IS MEANT BY ‘STUDENT STATUS OR CLASSIFICATION’?

A2: There are three levels of student classification:

1. Conditionally Classified: Admitted into MSCES Program pending satisfaction of certain specified prerequisites. When the student removes conditions to his/her admission, another form is filed by the Program with Admissions & Records called the Change in Graduate Status form to change the student’s status to ‘Classified’. The Program Director may allow a ‘conditionally admitted’ student to take graduate courses while working on prerequisites depending upon the level of student’s prior academic work.
2. Classified: Fully admitted into the MSCES Program.
3. Advanced to Candidacy: This status is granted after the student has demonstrated competency at the graduate level and demonstrated writing skills sufficient to support his/her completion of the final thesis/project/comprehensive exam. The student must file Form GS01.

Q3: HOW DO I BECOME A CLASSIFIED STUDENT?

A3: See A2.1.

Q4: HOW DO I GET AN ADVISOR?

A4: Program Director or a faculty designated by the Program Director will be your advisor who will help you develop your study plan. Unless informed otherwise, Program Director is your Advisor.

Q5: WHAT IS A STUDENT’S SUPERVISORY COMMITTEE?

A5: An MSCES student’s supervisory committee consists of three CES faculty, not more than one of which should be adjunct faculty. Further, the student should have done or must be doing some MSCES related academic work under these faculty members. It is possible to have additional members and/or observers in the committee with the approval of your Advisor and Program Director.

Q6: DO I NEED A SUPERVISORY COMMITTEE?

A6: You need a supervisory committee if you plan to choose thesis or design project as your culminating experience. If you choose the comprehensive examination option, you do not need a supervisory committee. In that case, your Advisor will monitor your progress and advise you accordingly.

Q7: HOW IS A SUPERVISORY COMMITTEE CREATED?

A7: Program Director appoints the students' supervisory committees. Generally, the members of a committee are proposed by the student, after obtaining their consent, to the Program Director. The Program Director, upon acceptance of the proposal, appoints the supervisory committee for the student. If not acceptable, the Program Director will discuss the matter with the student before appointing the committee.

Q8: HOW DO I BECOME ADVANCED TO CANDIDACY?

A8: See A2.3

Q9: HOW LONG DO I HAVE TO COMPLETE A MASTER'S DEGREE?

A9: Seven years. Coursework which is more than seven years old may not be used toward the degree unless it is validated through examination. The department will determine whether sufficient cause exists to warrant the examination; if not, the coursework must be retaken or new coursework substituted. Seven years is computed as 14 semesters, not 15 semesters.

Q10: IS THERE A COURSE-LOAD LIMIT FOR GRADUATE STUDENTS?

A10: Yes. Eight to 12 units of graduate-level coursework is considered a full-time load. However, students may take up to 15 units without special authorization. International students must carry at least a full time load. Part time students can carry as little as 1 unit per semester.

Q11: HOW CAN I TRANSFER MY PRIOR GRADUATE WORK TO APPLY TOWARDS MSCES DEGREE?

A11: Up to six units of prior graduate work which has not been applied towards any other degree and whose field, depth and breadth are within the scope of MSCES Program can be transferred towards MSCES degree. Transfer request is made any time after the student has enrolled into the MSCES Program. The request must be addressed to the Program Director and must include the following items: (i) identification of the courses from prior graduate work, (ii) copies of the syllabi of the courses to be transferred, and, the original transcripts showing grades obtained in those courses. If the originals of the transcripts were submitted to SSU earlier, only copies need to be attached with the request.

Q12: WHILE ENROLLED IN THE MSCES PROGRAM, CAN I TAKE GRADUATE COURSES AT ANOTHER INSTITUTION AND APPLY THEM TOWARDS THE MSCES DEGREE?

This is allowed only if those courses are not offered by the CES Program. If that is the case, approval from the Program Director must be taken before taking the courses at the other Institution(s). The other criteria remain the same as stated in A11.

Q13: CAN I TAKE AN INDEPENDENT STUDY (DIRECTED READINGS) COURSE ON TOPICS OF MY INTEREST? IF YES, WHAT IS THE PROCEDURE FOR IT?

A13: Yes, a student can apply up to 3-units of ‘directed readings’ course towards the 30-unit requirement of the MSCES Program. The course is taken under the supervision of a MSCES faculty. The course should not duplicate any regularly offered course and the topics should be within the scope of the MSCES Program. A proposal must be made by the student and approved by the Program Director. Use the standard ‘Request form to take directed readings course’ posted on the MSCES website and also available in the program office. As outlined in the above form, the following procedure must be followed:

1. Find a MSCES faculty who is willing to offer the directed readings course.
2. The faculty member and the student develop a course proposal which includes, justification for course offering, a detailed course syllabus, meeting schedule between the instructor and the student, the roles of the instructor and the student, test and exam procedure to be used and the semester the course is to be taken by the student.
3. Submit the proposal, signed by both the instructor and the student, for the approval of the Program Director.
4. After approval is given, the student can register for the course in the desired semester.

Q14: WHAT IS A CULMINATING EXPERIENCE?

A14: Every Master's program must culminate in one of the following: thesis; or a design project or a comprehensive examination. When you develop your study plan, you and your advisor will determine which culminating experience is most appropriate for you. Scope of the three plans are as follows.

1. Thesis research involves formulating and developing a new concept which will advance the existing knowledge in the chosen field of study, modeling and analysis and/or computer simulation of an unresolved problem to understand its behavior in order to apply it to find solution to a problem, performance evaluation of a system/subsystem which may lead to a new application or modifications to improve cost-performance tradeoffs, a new application of an existing theory or

- technique, a comparative in-depth study of many similar technologies such as protocols to determine their usefulness, and such.
2. A design project involves (i) implementing a proven new concept involving sufficient technical depth and breadth, (ii) developing a prototype using existing technology to do a meaningful task(s), (iii) integration of multiple subsystems to create a large system to achieve a major objective(s), or similar projects.
 3. A comprehensive exam assesses the student's ability to use the knowledge gained through all the course work undertaken in solving real world problems. The emphasis will be in assessing the student's ability to identify tools and techniques to be used, approach one must take, the tradeoffs one must consider, ability to determine practicality of the problem, etc., rather than exams in the individual courses. The problems may be open ended and the solutions may not be unique.

Q15: HOW SHOULD I PREPARE A THESIS/PROJECT PROPOSAL?

A15: A thesis/project proposal should be prepared to include the following components:

- (i) A brief overview of the field in which thesis/project is to be carried out. Identify the unresolved issues in the field, need for resolutions and/or new investigation/implementation.
- (ii) State the problem you want to investigate or solve or implement, how it fulfills the need(s) stated in (i) above and/or how it will benefit the scientific/industrial community.
- (iii) Explain why you think the problem is a realistic one, i.e., a solution is feasible and the expected time for the completion.
- (iv) Present step-by-step approach you plan to take in your investigations and how it draws upon state-of-the art.
- (v) Present briefly any preliminary work that you might have already done which forms the basis of the proposed work.
- (vi) Project what results you expect to get.
- (vii) State what resources will be required to carry out the project in a timely fashion and where do you expect to find these resources?

Q16: WHAT ARE MY RESPONSIBILITIES WHEN COMPLETING A THESIS/PROJECT?

A16: It is the responsibility of the student to:

1. Initiate constitution of a committee of people willing to act as supervising faculty on the final thesis/project for approval by the Program Director;
2. Decide, in consultation with his/her graduate advisor or committee chair, an appropriate and worthy focal topic for research;
3. Draft a description of the project and receive committee approval prior to enrollment in the thesis/project units;

4. Determine, in consultation with the committee, roles of the committee members, needs of the committee in working through the approval process, and to create an understanding of timelines and deadlines for submitting written work for approval;
5. Understand that re-writes will probably be necessary and that the guidance of the committee is to be taken seriously if the project is to be satisfactorily completed. The student needs to understand that no faculty member can be expected to act as simply a "rubber stamp" for his or her ideas and writing;
6. Obtain editorial help if necessary to meet the standards of the University and the program for quality and presentation of the information in the thesis;
7. Defend the thesis in an open forum prior to final approval;
8. Understand that final acceptance of the thesis/project is determined by the student's faculty committee, the Thesis Review Office, and the Director of Academic Programs and Graduate Studies. Posting of the final degree is dependent on clearance by all of the above parties.

Q17: WHAT ARE VARIOUS FORMS THAT DOCUMENT MY PROGRESS, AND WHO NEEDS TO REVIEW AND SIGN THEM?

A17: There are three forms that are housed in the Admissions and Records Office that are hard-copy forms:

1. When you apply for admission to the MSCES Program and your file is complete, the Departmental Recommendation for Applicants is sent by the Admissions and Records Office to the Program Director. This form is returned back to Admissions and Records when the Program Director has determined your admissions status, and confirms whether you will be admitted to their program and with what classification. It is signed by the Program Director.
2. The Change in Graduate Status Form is used to document any change in your graduate classification. It is also signed by the Program Director and/or by your Graduate Advisor.
3. The Application for Award of Degree form is what you file with Admissions and Records at the time you wish to graduate. Yours is the only signature required.

There are two forms that are used by both Program Office and the Graduate Studies Office to verify your progress toward the degree:

- a. The Advancement to Candidacy (GS01) form is filed when you near the end of your program and are ready to begin your culminating project. This form has been described above, and is signed by your supervising committee, the graduate coordinator in your department, and the Associate Vice President for Academic Programs. Once these signatures are in place, information about your change in status is forwarded to the Admissions and Records Office.
- b. The Completion of Requirements (GS02) form is filed when you reach the end of your program. For those who are completing the degree with comprehensive exam, it is filed during the last semester of attendance when the coursework has been completed and the comprehensive exam has been passed. For those completing a

thesis or project, it is submitted with the copy of the thesis/project report for review after it has been defended and approved by the department faculty. The Completion of Requirements form is signed by the Chair of the Supervising Committee, by the Program Director, and by the Director of Academic Programs and Graduate Studies.

Q18: HOW DO I APPLY TO GRADUATE?

A18: You must file an Application for Award of Degree with the Office of Admissions and Records. Deadlines to apply for graduation are posted in the Schedule of Classes. This application triggers Admissions and Records to order a diploma for you with the appropriate graduation date. If you fail to complete all of the requirements by the deadlines supplied by the Graduate Studies Office and the Office of Admissions and Records, you will need to re-apply to graduate.

Q19: WHEN DO I ENROLL FOR THESIS/PROJECT CREDIT?

A19: When you are ready to begin work on the thesis/project, you will describe the focus of your culminating experience by filing the Advancement to Candidacy form (GS01). After that has been done, you can enroll for thesis/project credit with the approval of your thesis/project advisor.

Q20: WHO CAN ANSWER MY QUESTIONS ABOUT THESIS CONTENT AND FORMAT?

A20: The Chair of your thesis committee is the best source. In addition you should follow the style manual that is required by your discipline. Also available for format guidelines is the booklet GUIDELINES FOR MASTER'S THESES AND PROJECTS, available in the Graduate Studies Office. The Graduate Studies Office has a thesis reader who reviews the thesis for observance of format that is required for publication by the SSU library. She is willing to preview pages and answer formatting questions. She will review a copy of your thesis prior to the need to print the final copies on rag (cotton) paper and let you know if any changes are required. You will always be given time to prepare minor changes in format if you file for graduation and submit your thesis for review within the stated deadlines.

Q21: DOES THE FOCUS OR METHOD OF RESEARCH USED IN MY THESIS/PROJECT REQUIRE SPECIAL APPROVAL?

A21: If your thesis/project either directly or indirectly involves humans in research, you must seek approval from the Committee on the Rights of Human Subjects prior to initiating any activity with the subjects. There is human subject involvement when human beings are asked to participate in any manner what so ever.

Research proposals for which the question of human subject involvement is itself uncertain or ambiguous must be submitted for review. The Office of Sponsored Programs advises for this protocol, reviews the research methodology, and makes suggestions to the

Committee on the Rights of Human Subjects. Forms are available in the Office of Sponsored Programs, Nichols Hall, Room 146.

Q22: HOW LONG DO I HAVE TO WORK ON MY THESIS?

A22: You have four semesters to complete your thesis. A grade of SP (Satisfactory Progress) is awarded to students who do not finish their thesis/project during the semester of enrollment. The SP grade will remain until the student submits the thesis/project for review. Students may petition the Associate Vice President for Academic Programs for a one-semester extension of time with appropriate reasons. These petitions must be filed before the expiration of the four-semester time limit. Students who do not complete thesis work in a timely fashion may be required to re-enroll in the thesis units, and in some cases re-apply to the university and to the Program.

Q23: WHAT IS THE CONTINUOUS ENROLLMENT FEE?

A23: The Continuous Enrollment Policy requires graduate students who have completed their coursework, and who have begun to work on their culminating projects-theses, or other final projects to maintain enrollment each additional semester until they graduate.

Q24: IS A DEFENSE OF THE THESIS/PROJECT REQUIRED?

A24: Yes. If you submit a thesis or project as your culminating experience, you will need to give a public defense before the members of your thesis committee. The defense is open to the university community, and must be held prior to final approval of the thesis/project by the faculty committee and the Director of Academic Programs and Graduate Studies.

Q25: WHAT IS THE COMMON STRUCTURE FOR A THESIS DEFENSE?

A25: The date of the defense is set by arrangement with the Program Director and held on a day when all committee members can be present. Normally the Program Office will publish the date of the thesis defense through normal campus publications, flyers, and through e-mail trees. All interested members of the campus community are invited to attend the defense. Defenses are normally an hour long. The first 40-45 minutes are allotted for the student to present his or her material using visual aids to help describe their work. The remainder of the time is open for questions from the attendees. The defense is the time for the student to present the results of their efforts and receive feedback from their peers and the campus community.

Q26: WHO PREPARES AND CONDUCTS COMPREHENSIVE EXAM?

Comprehensive exam of a student is prepared and conducted by an examination committee appointed by the Program Director. This committee may be different for each student, or may be the same for a group of students, depending on the degree of commonality in the course work completed by the students.

Q27: WHEN IS COMPREHENSIVE EXAM SCHEDULED?

Comprehensive exams will be scheduled in the first week of (i)November for the students planning to graduate in Fall, (ii)April for the students planning to graduate in Spring and (iii)July for the students planning to graduate in summer. A student planning to take comprehensive exam during a semester or summer session must submit 'Request to take comprehensive exam' form to the Program Director no later than the first week of (i)September for Fall, (ii)February for Spring and (iii)June for summer session, respectively. Duration of the exam depends on the examination committee and varies from 4 to 6 hours. Typically, its duration is 4 hours.

Q28: WHAT IS THE SCOPE OF A COMPREHENSIVE EXAM?

Comprehensive exam assesses a student's knowledge gained in the individual courses as well as his/her ability to integrate the knowledge gained from the individual courses to be able to solve real world problems. The emphasis is in assessing the student's ability in defining the problem, determining if the problem is solvable, formulating a solution, identifying tools and techniques which will be required in solving the problem, making design tradeoffs, etc. The make-up of the exam depends on the examination committee. However, typically it consists of two parts: (i)first part consisting of questions from the individual courses, and, (ii)the second part consisting of open ended problems requiring knowledge from multiple courses and whose solutions may not be unique.

Q29: HOW SHOULD I PREPARE FOR THE COMPREHENSIVE EXAM?

A student must discuss the scope of his/her comprehensive exam with his/her Advisor. The Advisor will guide the student about which courses to focus on and how to prepare for the open-ended problems.

Q30: ARE THERE ANY SPECIAL RULES FOR INTERNATIONAL STUDENTS?

There are some course load restrictions on international students depending on the type of visa they hold. Also, there may be some restrictions on pursuing a degree program on certain types of visa. The INS rules change from time to time. Therefore, the international students must discuss these issues with the Office of the International Services.