



American Society for Engineering Management Engineering Management Master's Program Certification Academic Standards

A. Faculty

1. There will be at least one full time EM faculty member who is responsible for the program.
2. Faculty members with EM expertise will teach one-third or more of the courses. State how many of these faculty members have expertise in Engineering Management.
3. The faculty workload must be reasonable and appropriate for the stated mission of the program.

B. Curriculum Requirements

1. A balance between qualitative and quantitative courses. Curriculum should reflect the domains of the EMBOK.
2. At least one third of the curriculum will be management-related including management of people, projects, and strategy courses.
3. A third of the courses in the Engineering Management Program have a coordinator from the EM program who has oversight for the course content.
4. Course material must be directly related to technology driven organizations.
5. The curriculum must require each student to demonstrate a command of written and oral communication skills in English or in the language of instruction in countries where English is not the language of instruction.
6. Courses must relate to knowledge workers in a global environment.
7. Each student is required to perform a capstone project or thesis using analysis and integration of Engineering Management concepts. For programs that do not have a capstone project or a thesis option, project work from individual courses in the program should demonstrate application of theory in real world settings.
8. A minimum of one course in statistics or Quality Engineering or a related area.
9. A minimum of one course in engineering economy or Financial Management or a related area.
10. Two courses in quantitative analysis are required.

C. Students - Admission Requirements

1. The EM program will require a minimum GPA and/or other academic competence from an ABET-accredited undergraduate Engineering or Engineering Technology program or equivalent accreditation in the country from where the student received the bachelor's degree. Students who are admitted below the minimum admission requirements will need to be admitted provisionally to ensure student success.
2. Other students including students from non-Engineering background may be admitted provisionally with an appropriate mathematical background equivalent to at least one semester of calculus.

D. Administrative Support

1. Students must have access to an academic advisor for the purpose of planning a program of study that meets both the program and the student's professional requirements.
2. The program must have access to sufficient resources and facilities to meet the needs of the targeted student population. Resources generated by the program are sufficiently reinvested in the program.

3. The student must have access to appropriate literature. This usually means access to a library with a collection of books and periodicals appropriate to engineering management theory and practice.

Certification Process

Application

The program applying for certification will send their study guide and the program certification fees to ASEM world headquarters. Programs that are not taught in English will need to provide a study guide in English.

The Certification Visit

The Certification College of ASEM will select an evaluation team for each graduate program making application to be certified.

The team makeup will be discussed with the chair of the applying program. Adjustments in committee makeup will be made, as necessary.

For a first certification, 2 evaluators will be selected to make the visit. For recertification, 1 evaluator will be selected to make the visit.

They will use the criteria adopted by ASEM in making the assessment. For program certifications in countries where English is not the language of instruction, the certification visit activities will be conducted in English. Where needed, appropriate translators should be provided by the host institution.

Certification Results

- Programs found to be in conformance to the criteria will receive a four-year certification.
- Those programs with minor infractions that may be corrected within a short period of time – one academic year for example - will receive a two-year certification. If necessary, a follow-up visit may be required to assess the value of changes made. The follow-up visit will be made by one evaluator.
- Submission of evidence of appropriate correction will result in a four – year certification from the date of the initial visit.
- Meritorious programs that do not conform to all Engineering Management certification requirements may be certified as an alternative program. Management of Technology programs are evaluated according to standards that have minor differences from those used to evaluate EM programs.
- Alternative Program Certification is for programs (such as Management of Technology Programs) that have a well-designed curriculum, that have a specified and limited mission and that meet most of the EM certification requirements.
- All certified programs will be listed annually in the Engineering Management Journal (EMJ) and on the ASEM website along with the logo of the institution/University.

Program Certification Costs

- Certification evaluation visit fee will be \$2,500 plus the cost of the team travel. Follow-up visits will be \$1,500. Program recertification visit fee will be \$2000. The institution seeking certification will cover travel expenses of evaluators for the visits.