

# Materials Science and Engineering

## Master of Engineering (M.Eng. Non-Thesis)

<b><sup>1</sup>Required Background “Leveling” Courses</b>	<b>Semester</b>	<b>Grade</b>	<b>Credits</b>
MSEN 601: Fundamental Materials Science and Engineering			3
MSEN 603: Fundamental Soft & Biomaterials Materials Science & Engineering			3
<b>Seminar Requirement</b> ( <i>Minimum 1 cr - Maximum 2 cr</i> )			
MSEN 681: Seminar			
<b>MSEN Core Courses</b> ( <i>6 cr</i> )			
1. MSEN 602: Physics of Materials Science & Engineering			3
2. MSEN 640: Thermodynamics Materials Science & Engineering			3
<b>Math Requirement</b> ( <i>choose one, 3-4 cr</i> )			
3. MATH 601-604, STAT 601, STAT 630, PHYS 615, PHYS 616			
<b><sup>2</sup>MSEN Electives</b> ( <i>Minimum of 9 cr <b>or</b> 3, graduate MSEN courses</i> )			
4. MSEN:			
5. MSEN:			
6. MSEN:			
<b><sup>3</sup>Free Electives</b> ( <i>Minimum of 9cr, any engineering or science 400 level course or above</i> )			
7.			
8.			
9.			
<b><sup>4</sup>“Professional Development Recommendations” Courses</b> ( <i>choose one, 2-3 cr</i> )			
10. MSEN: 684 (internship), 685 (directed studies), or courses that can count toward earning a <a href="#">certificate</a> ( <a href="#">Corrosion</a>   <a href="#">Informatics</a> ).			
<b><sup>4</sup>“Extra” Courses</b> ( <i>optional, not required</i> )			
<b>Comments:</b>			
<b>Degree Plan must equal 30 hours — Total:</b>			

**Committee:** Consists of one member (the Chair) who can be a [full-time core/joint MSEN faculty](#) or [affiliated MSEN faculty](#).

Chair \_\_\_\_\_

Degree plans must be submitted electronically at <http://ogsdpps.tamu.edu> during your fourth semester of registration or you may be blocked from further registration. You must establish a committee before submitting a degree plan.

## Notes:

1. **Required Background “Leveling” Courses** are MSEN 601, MSEN 603. Any student who does not have a degree in Materials Science and Engineering must take these two courses— they will be counted as Free Electives. Any student who does have a degree in Materials Science & Engineering is not required to take those courses— they are automatically waived.
2. **MSEN Electives** are graduate-level Materials Science & Engineering courses frequently referred to as technical electives.
3. **Free Electives** are any 400 level or above engineering and science course. The Background Leveling Courses (MSEN 601 & 603) can be used to fulfill this requirement— (see note 1).
4. **Remaining credit** hours to fulfill the minimum credit hour requirement (**30 cr**) may be taken from other courses, including Internship (MSEN 684), and Directed Studies (MSEN 685), subject to Departmental rules.
  - Limitations on the use of certain courses to fulfill credit hour requirements ([See Graduate Catalog](#))
  - Any combination of 681, 684, and 685 may not exceed 25 percent (7 cr) of the total credit hour (30 cr) requirement shown on the individual degree plan:
  - MSEN 681 (Seminar) does not count as MSEN Elective or Free Electives— maximum 2 cr
  - MSEN 684 (Internship) does not count as MSEN Elective or Free Electives— maximum 6 cr
  - MSEN 685 (Directed Studies) may be used as MSEN Elective or Free Elective— maximum 6 cr
  - MSEN 691 (Research) cannot be used toward a non-thesis degree.
  - A maximum of 9 hours of advanced undergraduate courses (300- or 400-level).
  - The maximum number of credit hours considered for transfer credit is 12 cr as per University Rules.
    - \* Courses for which transfer credits are sought must have been completed with a grade of “B” or greater and cannot have been used to earn a previous degree— must have instructor, graduate director, chair, committee, and Graduate Professional School approval.

## Master’s Non-Thesis Catalog Requirments:

1. You must maintain satisfactory academic progress by completing MSEN academic degree milestones to avoid probation:
  - a. Before end of 1<sup>st</sup> Semester— Finding a Faculty Advisor/Supervisor
  - b. Before Mid 2nd Semester— Establish Committee & Degree Plan Submission (due after earning 9 cr)
  - c. Before 4<sup>th</sup> Semester— Complet all degree plan coursework (average 2 years)
2. You must maintain an overall, semester, and degree plan grade point average of 3.0 or higher for all of your classes at Texas A&M University.
3. You must perform your assigned duties and research satisfactorily.

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