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Send inquiries to: mechanicalengineeringundergrad@stonybrook.edu

Department of Mechanical Engineering, Stony Brook University (2020)

Technical Electives

(≥ 9 credits with at least 2 MEC courses)

- Mechanical Engineering
  - MEC 393, 396, 423, 450, 455, 456, 465
  - MEC 506, 509, 518, 526, and other 500-level courses

- Applied Math and Statistics
  - AMS 310, 311, 315, 341, 351, 352

- Biomedical Engineering
  - BME 353, 481

- Civil Engineering
  - CIV 310, 320, 330, 420, 422

- Chemical Engineering
  - CHE 369, 372

- Computer Science
  - CSE 308, 327, 328, 352

- Electrical Engineering

- Material Science and Engineering
  - ESM 333, 339, 350, 356, 369, 486

- Technology and Society
  - EST 326, 327, 364, 391, 393

Basic Science Electives

(≥ 3 credits)

- PHY 251/252 Modern Physics (4)
- ESG 261 Engineering Intro Solid State (3)
- PHY 300 Waves and Optics (4)
- CHE 132 General Chemistry II (4)
- BIO 202 Molecular and Cellular Biology (3)
- BIO 203 Cellular and Organ Physiology (3)
- GEO 260 Intro to Geophysics (4)
- GEO 312 Structure and Prop. of Materials (3)
- AST 203 Astronomy (4)
- AST 205 Intro to Planetary Science (3)
- ATM 205 Intro to Atmospheric Science (3)

Minor in Mechanical Engineering

(≥ 10 credits)

- MEC 260 Engineering Statics
- MEC 262 Engineering Dynamics
- MEC 301 Thermodynamics (or ESG 302)
- MEC363 Mechanics of Solids

Four Required Courses:

- MEC 260 Engineering Statics
- MEC 262 Engineering Dynamics
- MEC 301 Thermodynamics (or ESG 302)
- MEC363 Mechanics of Solids

Minor in Mechanical Engineering

(≥ 16 credits)

- MEC 260 Engineering Statics
- MEC 262 Engineering Dynamics
- MEC 301 Thermodynamics (or ESG 302)
- MEC363 Mechanics of Solids

Four Required Courses:

- MEC 260 Engineering Statics
- MEC 262 Engineering Dynamics
- MEC 301 Thermodynamics (or ESG 302)
- MEC363 Mechanics of Solids

Additional Requirements

- Graduation ≥ C
- Graduation ≥ D
- Additional term offerings

Requirements for Admission to the Major in Mechanical Engineering

Qualification for admission is based upon all of the following requirements:

1. Completion of PHY 131 or PHY 120 or PHY 127 or their equivalents,
2. One MEC course required for the major and taken at Stony Brook,
3. Earn 10 or more credits of mathematics, physics, and engineering courses that are taken at Stony Brook and satisfy the Major’s requirements,
4. Obtain a G.P.A. of at least 3.2 in major courses with no more than one grade below B-, and
5. No courses required for the major have been repeated.

Admission is highly competitive and contingent upon program capacity.

Accelerated BE/MS Program in Mechanical Engineering (5 years)

The accelerated BE/MS program in mechanical engineering allows students to use up to 6 graduate credits (typically technical electives) taken as an undergraduate towards MS degree requirements, thus reducing the normal time required to complete the MS degree. The program is designed for upper-division mechanical engineering students with superior academic records (GPA ≥ 3.2).