

**Physics Major** 120  
54 for Major and Minor

Major	36
PHY 241 - Technical Physics I	4
PHY 242 - Technical Physics II	4
EGR 250 - Engineering Statics	4
EGR 321 - Engineering Dynamics	4
PHY 333 - Modern Physics	4
PHY 347 - Mathematical Applications in Physics	3
PHY 440 - Electricity and Magnetism	3
EGR 470 - Technical Presentations	2
PHY ### (1hr adv)	5
PHY 430/431/441 - Thermo, Quantum, or Optics	3

Electives	22
Elective	3
Elective	3
Elective	3
Elective	3
Elective	3
Elective	3
Elective	4

Math Minor	18
MTH 233 - Calculus I	4
MTH 234 - Calculus II	4
MTH 333 - Calculus III	4
MTH 337 - Differential Equations	3
MTH 317 - Linear Algebra	3

Additional Requirements	11
CSC 102 - Computer Science Principles	3
CHE 133 - General Chemistry I	4
CHE 134 - General Chemistry II	4

Core	33
ENG 131 - Rhetoric and Composition	3
ENG 132 - Research and Argument	3
HIS 133 - U.S. History Survey 1000-1877	3
HIS 134 - U.S. History Survey 1877-Present	3
PSC 141 - U.S. Government: Theory and Politics	3
PSC 142 - U.S. Government: Structure & Functions	3
Communications **	3
Technical Writing or Core Equivalent **	3
ART/MUS/THR/DAN/MHL **	3
Literature or Core Equivalent **	3
Social Science or Core Equivalent **	3

**Engineering Physics** 120  
55 for Major

Major	55
EGR 111 - Foundations of Engineering I	3
EGR 112 - Foundations of Engineering II	3
EGR 215 - Principles of Electrical Engineering	4
PHY 241 - Technical Physics I	4
PHY 242 - Technical Physics II	4
EGR 250 - Engineering Statics	4
EGR 321 - Engineering Dynamics	4
PHY 333 - Modern Physics	4
EGR 343 - Digital Systems	3
PHY 347 - Mathematical Applications in Physics	3
PHY 440 - Electricity and Magnetism	3
EGR 470 - Technical Presentations	2
Emphasis	3
Emphasis	3
Emphasis	3
EGR 490 - Capstone Design	2

Additional Requirements	21
MTH 233 - Calculus I	4
MTH 234 - Calculus II	4
MTH 333 - Calculus III	4
MTH 337 - Differential Equations	3
Elective (3hrs must be advanced)	6

Additional Requirements	11
CSC 102 - Computer Science Principles	3
CHE 133 - General Chemistry I	4
CHE 134 - General Chemistry II	4

Core	33
ENG 131 - Rhetoric and Composition	3
ENG 132 - Research and Argument	3
HIS 133 - U.S. History Survey 1000-1877	3
HIS 134 - U.S. History Survey 1877-Present	3
PSC 141 - U.S. Government: Theory and Politics	3
PSC 142 - U.S. Government: Structure & Functions	3
Communications **	3
Technical Writing or Core Equivalent **	3
ART/MUS/THR/DAN/MHL **	3
Literature or Core Equivalent **	3
Social Science or Core Equivalent **	3

**Students Choose an Emphasis for the Engineering Physics Degree at Stephen F. Austin State University**

Mechanical Engineering Emphasis	12
AGM 325/326 (CAD) - Computer Aided Drafting	3
EGR 305 - Mechanics of Materials *	3
EGR 345 - Fluid Mechanics *	3
PHY 430 - Thermodynamics	3

Electrical Engineering Emphasis	12
EGR 314 - Control Systems and Signals	3
EGR 344 - Microcomputer Interfacing	3
EGR 370 - Electrical Properties of Materials or Linear Circuit Analysis *	3
PHY 441 or 431 - Optics or Quantum Mechanics	3

\*\* Contact your advisor for options or alternatives to these requirements.

Note that no minor is required for an engineering degree.

These tables do not include MTH 133, 138, and 139 which most students are required to take.

Capstone Design - This is a senior project to be built using the the machine shop and electronics shop and present the results in a seminar (EGR 470)