



Electronics Engineering (LENG)

Core Requirements

| Code | Title | Credits | Prerequisites | Corequisites |
|----------|-----------------------------------------------------|---------|-----------------------------|--------------------|
| CENG355 | Advanced Digital Logic Design | 3 | EENG250 - CSCI250 - CENG300 | CENG352L |
| CSCI250 | Introduction to Programming | 3 | | ENGL101 - CSCI250L |
| CSCI250L | Introduction to Programming Lab | 1 | | ENGL101 - CSCI250 |
| IENG300 | Engineering Project Management | 3 | ENGL201 | |
| MATH210 | Calculus II | 3 | MATH161 - MATH160 | |
| MATH220 | Calculus III | 3 | MATH210 | |
| MATH225 | Linear Algebra with Applications | 3 | MATH161 - MATH160 | |
| MATH270 | Ordinary Differential Equations | 3 | MATH210 | MATH225 |
| MATH310 | Probability & Statistics for Scientists & Engineers | 3 | MATH210 - ENGL201 | |
| MENG225 | Engineering Drawing & CAD | 3 | | |
| MENG250 | Mechanics I (Statics) | 3 | ENGL051 | MATH210 |
| PHYS220 | Physics for Engineers | 3 | PHYS161 - ENGL101 - PHYS160 | MATH210 |
| Total | | 34 | | |

Major Requirements

| Code | Title | Credits | Prerequisites | Corequisites |
|----------|--------------------------------------|---------|-----------------------------|--------------|
| CENG300 | Fundamentals of Digital Logic Design | 3 | EENG250 - ENGL101 | |
| CENG352L | Digital Logic Circuits Lab | 1 | EENG301L - CENG300 | |
| CENG380 | Microprocessors and Microcontrollers | 3 | EENG250 - CSCI250 - CENG300 | CENG352L |
| CENG400L | Microcontroller Applications Lab | 1 | CENG380 | |
| EENG250 | Electric Circuits I | 3 | ENGL051 | MATH210 |
| EENG300 | Electric Circuits II | 3 | EENG250 | EENG301L |
| EENG301L | Electric Circuits Lab | 1 | EENG250 | EENG300 |
| EENG350 | Electronic Circuits I | 3 | EENG250 | EENG350L |
| EENG350L | Electronic Circuits I Lab | 1 | EENG301L | EENG350 |
| EENG385 | Signals and Systems | 3 | MATH225 - EENG300 | MATH270 |
| EENG388 | Electromagnetic Fields and Waves | 3 | PHYS220 - MATH220 - EENG300 | |
| EENG400 | Electronic Circuits II | 3 | EENG350 | EENG400L |
| EENG400L | Electronic Circuits II Lab | 1 | EENG350 | EENG400 |
| EENG405 | CAD Tools for Electronics | 3 | | |
| EENG410 | Power Electronics I | 3 | EENG350 | EENG410L |
| EENG410L | Power Electronics I Lab | 1 | | EENG410 |
| EENG435 | Control Systems | 3 | EENG385 | EENG435L |
| EENG435L | Control Systems Lab | 1 | | EENG435 |
| EENG447 | Analog Communication Systems | 3 | MATH310 - EENG385 | EENG467L |
| EENG456L | Advanced Microcontroller Lab | 1 | CENG400L | |
| EENG459 | Electronic Systems | 3 | EENG400 | EENG459L |
| EENG459L | Electronic Systems Lab | 1 | | EENG459 |
| EENG462 | Fundamentals of Optoelectronics | 3 | EENG388 - EENG250 | EENG462L |
| EENG462L | Fundamentals of Optoelectronics Lab | 1 | | EENG462 |
| EENG467L | Analog Communication Systems Lab | 1 | | EENG447 |

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|---------|----------------|----|------------------------------------------------------------------------------|--|
| EENG495 | Senior Project | 3 | EENG447 - EENG435 - EENG410 - EENG405 - IENG300 - CENG380 - EENG400 | |
| Total | | 56 | | |

General Education Requirements

| Code | Title | Credits | Prerequisites | Corequisites |
|---------|---------------------------------------------|---------|---------------|--------------|
| ARAB200 | Arabic Language and Literature | 3 | | |
| CULT200 | Introduction to Arab - Islamic Civilization | 3 | | |
| ENGL201 | Composition and Research Skills | 3 | ENGL151 | |
| ENGL251 | Communication Skills | 3 | ENGL201 | |
| Total | | 12 | | |

General Education Electives

| Code | Title | Credits | Prerequisites | Corequisites |
|-------|----------|---------|---------------|--------------|
| | Elective | 3 | | |
| | Elective | 3 | | |
| Total | | 6 | | |

Major Elective Courses

| Code | Title | Credits | Prerequisites | Corequisites |
|-------------------------------------|-------|---------|---------------|--------------|
| There are no Major Elective Courses | | | | |