

STUDY PLAN 2023–2024

Prerequisite

Co-requisite

Energy & Electrical

Mechatronics

Languages & General

Mechanical

Math & Sciences

Industrial

Computing

TECHNICAL & SCIENCE CORE

GENERAL / UNIVERSITY

GERMAN / MILESTONES

|             |   |                                                                                                      |                                                                                                              |                                                                                          |                                                                                             |                                                                                            |                                                                                                       |                                                                                  |                                                                               |                                                                      |                                                                                              |
|-------------|---|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| First Year  | 1 | <div>MATH101</div> <div>Calculus I</div> <div>MATH0099</div>                                         | <div>PHYS103</div> <div>Physics I</div>                                                                      | <div>ARB100</div> <div>Arabic</div> <div>ARB0099</div>                                   |                                                                                             | <div>CS116</div> <div>Computing Fundamentals</div>                                         | <div>CS1160</div> <div>Computing Fundamentals Lab</div> <div>CS116</div>                              |                                                                                  | <div>ENGL1001</div> <div>Upper-Intermediate English</div> <div>ENGL0099</div> |                                                                      | <div>GERL101</div> <div>German I</div>                                                       |
|             | 2 | <div>MATH102</div> <div>Calculus II</div> <div>MATH101</div>                                         | <div>PHYS104</div> <div>Physics II</div> <div>PHYS103</div>                                                  | <div>PHYS106</div> <div>Physics Lab</div> <div>PHYS103PHYS104</div>                      |                                                                                             | <div>CS117</div> <div>Object Oriented Programming</div> <div>CS116CS1160</div>             | <div>CS1170</div> <div>Object Oriented Programming lab</div> <div>CS116CS1160CS117</div>              | <div>CHEM103</div> <div>General Chemistry</div>                                  | <div>ENGL1002</div> <div>Advanced English</div> <div>ENGL1001</div>           |                                                                      | <div>GERL102</div> <div>German II (B1/B2 Tracks)</div> <div>GERL101</div>                    |
| Second Year | 1 | <div>MATH203</div> <div>Applied Mathematics for Engineers</div> <div>MATH102ARB/ENGL/MATH 0099</div> | <div>ENE211</div> <div>Fundamentals of Electrical Circuits</div> <div>PHYS104MATH203ARB/ENGL/MATH 0099</div> | <div>ENE213</div> <div>Electrical Circuits Lab</div> <div>ENE211ARB/ENGL/MATH 0099</div> |                                                                                             | <div>CE212</div> <div>Digital Systems</div> <div>CS116ARB/ENGL/MATH 0099</div>             | <div>CE2120</div> <div>Digital Systems Lab</div> <div>CE212ARB/ENGL/MATH 0099</div>                   |                                                                                  | <div>IE121</div> <div>Workshop</div>                                          | <div>UNIVERSITY ELECTIVE I</div> <div>University Elective</div>      | <div>GERL201</div> <div>German III (B1/B2 Tracks)</div> <div>GERL102ARB/ENGL/MATH 0099</div> |
|             | 2 | <div>MATH205</div> <div>Differential Equations</div> <div>MATH102ARB/ENGL/MATH 0099</div>            | <div>ENE212</div> <div>Electrical Circuits and Systems Analysis</div> <div>ENE211ARB/ENGL/MATH 0099</div>    |                                                                                          | <div>EE315</div> <div>Probability, Statistics and Random Processes</div> <div>MATH102</div> | <div>CE331</div> <div>Signals and Systems</div> <div>MATH203</div>                         | <div>CE201</div> <div>Computer Architecture and Organization</div> <div>CE212ARB/ENGL/MATH 0099</div> | <div>ME0111</div> <div>Computer Aided Engineering Drawing</div> <div>CS116</div> |                                                                               |                                                                      | <div>GERL202</div> <div>German IV (B1/B2 Tracks)</div> <div>GERL201ARB/ENGL/MATH 0099</div>  |
| Third Year  | 1 | <div>EE317</div> <div>Linear Algebra</div> <div>MATH102</div>                                        | <div>EE241</div> <div>Electronics 1</div> <div>ENE211CS116CS1160ARB/ENGL/MATH 0099</div>                     | <div>EE2410</div> <div>Electronics 1 Lab</div> <div>ENE211EE241ARB/ENGL/MATH 0099</div>  | <div>EE333</div> <div>Electromagnetics</div> <div>MATH203</div>                             | <div>EE321</div> <div>Communication Systems I</div> <div>CE331</div>                       | <div>EE3210</div> <div>Communication Systems I Lab</div> <div>EE321</div>                             | <div>CE352</div> <div>Computer Networks</div> <div>CS116CE201</div>              |                                                                               |                                                                      | <div>GERL301</div> <div>German V (B1/B2 Tracks)</div> <div>GERL202</div>                     |
|             | 2 | <div>BM371</div> <div>Numerical Methods for Engineers</div> <div>MATH203MATH205CS116</div>           | <div>EE342</div> <div>Electronics II</div> <div>EE241</div>                                                  | <div>ENE311</div> <div>Electrical Machines</div> <div>ENE212EE333</div>                  | <div>EE322</div> <div>Communication Systems II</div> <div>EE321EE315EE317</div>             | <div>EE361</div> <div>Modeling and Simulation of Electrical Systems</div> <div>CE331</div> | <div>EE3220</div> <div>Communication Systems II Lab</div> <div>EE322</div>                            | <div>CE3561</div> <div>Computer Networks Lab</div> <div>CE352</div>              | <div>ENE313</div> <div>Electrical Machines Lab</div> <div>ENE311</div>        | <div>EE393</div> <div>Field Training</div> <div>Dept. approval</div> | <div>GERL302</div> <div>German VI (B1/B2 Tracks)</div> <div>GERL301</div>                    |
| Fourth Year | 1 | <div>PROGRAM ELECTIVE I</div> <div>Program Elective</div>                                            | <div>PROGRAM ELECTIVE II</div> <div>Program Elective</div>                                                   | <div>PROGRAM ELECTIVE III</div> <div>Program Elective</div>                              | <div>PROGRAM ELECTIVE IV</div> <div>Program Elective</div>                                  |                                                                                            |                                                                                                       |                                                                                  |                                                                               |                                                                      |                                                                                              |
|             | 2 | <div>EE493</div> <div>International Internship</div>                                                 |                                                                                                              |                                                                                          |                                                                                             |                                                                                            |                                                                                                       |                                                                                  |                                                                               |                                                                      |                                                                                              |
| Fifth Year  | 1 | <div>CE441</div> <div>Embedded System Design</div> <div>CE201</div>                                  | <div>EE343</div> <div>Digital Electronics</div> <div>EE241</div>                                             | <div>EE3430</div> <div>Digital Electronics Lab</div> <div>EE343</div>                    | <div>EE570</div> <div>Cloud Computing and Big Data</div> <div>CE352</div>                   | <div>EE521</div> <div>5G &amp; Beyond Communications</div> <div>EE321</div>                | <div>EE5210</div> <div>5G Communications Lab</div> <div>EE521</div>                                   |                                                                                  | <div>UNIVERSITY ELECTIVE II</div> <div>University Elective</div>              |                                                                      | <div>EE492</div> <div>Senior Project I</div> <div>Dept. approval</div>                       |
|             | 2 | <div>ENE415</div> <div>Power systems</div> <div>ENE311</div>                                         |                                                                                                              | <div>ME0344</div> <div>Control Systems I</div> <div>CE331EE361</div>                     | <div>ME0345</div> <div>Control and Vibration Lab</div> <div>ME0344</div>                    |                                                                                            |                                                                                                       | <div>NE101</div> <div>National Education</div>                                   | <div>MILS100</div> <div>Military Science</div>                                |                                                                      | <div>EE594</div> <div>Senior Project II</div> <div>EE492</div>                               |