

. Program Study Plan

| Level | Course Code | Course Title | Required or Elective | Pre-Requisite Courses | Credit Hours | Type of requirements (Institution, College or Department) |
|----------------|--------------------|--|-----------------------------|------------------------------|---------------------|---|
| Level 1 | 140MATH-2 | Introduction of Mathematics | Required | No | 2 | Preparatory Year |
| | 140ENG-2 | Reading Skills | Required | No | 2 | Preparatory Year |
| | 141ENG-2 | Writing Skills | Required | No | 2 | Preparatory Year |
| | 142ENG-2 | Listening and Speaking Skills | Required | No | 2 | Preparatory Year |
| | 143ENG-2 | Grammar | Required | No | 2 | Preparatory Year |
| | 140SKL-2 | Learning, Thinking and Research Skills | Required | No | 2 | Preparatory Year |
| | 140TEC-2 | Computer Skills 1 | Required | No | 2 | Preparatory Year |
| Level 2 | 150MATH-4 | Calculus 1 | Required | 140MATH-2 | 4 | Preparatory Year |
| | 150ENG-3 | General English | Required | No | 3 | Preparatory Year |
| | 151ENG-2 | Technical Report Writing | Required | No | 2 | Preparatory Year |
| | 150MAAN-1 | Professional Ethics | Required | No | 1 | Preparatory Year |
| | 150SKL-2 | Communication Skills | Required | No | 2 | Preparatory Year |
| | 150TEC-1 | Computer Skills 2 | Required | 140TEC-2 | 1 | Preparatory Year |
| Level 3 | 104PHYS-4 | Principles of Physics | Required | No | 4 | Science |
| | 282MATH-3 | Calculus 2 | Required | No | 3 | College |
| | 211CCS-4 | Fundamentals of Programming | Required | No | 4 | College |
| | 111ISL-2 | Introduction to Islamic Culture | Required | No | 2 | Institution |

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| | 201ARAB-2 | Arabic Language Skills | Required | No | 2 | Institution |
| Level 4 | 286MATH-3 | Calculus 3 | Required | 282MATH-3 | 3 | Science |
| | 112ISL-2 | Islamic Culture 2 | Required | No | 2 | Institution |
| | 212CCS-4 | Object Oriented Programming | Required | 211CCS-4 | 4 | College |
| | 283MATH-3 | Discrete Mathematics | Required | No | 3 | College |
| | 231CCS-4 | Computer Organization and Architecture | Required | No | 4 | Department |
| Level 5 | 113ISL-2 | Islamic Culture 3 | Required | No | 2 | Institution |
| | 101BIOL-4 | General Biology | Required | No | 4 | Science |
| | 284MATH-3 | Linear Algebra | Required | No | 3 | College |
| | 340CIS-3 | Fundamental of Databases | Required | No | 3 | Department |
| | 321CCS-3 | Data Structures | Required | 211CCS-4 | 3 | College |
| Level 6 | 114ISL-2 | Islamic Culture 4 | Required | No | 2 | Institution |
| | 202ARAB-2 | Arabic Writing | Required | No | 2 | Institution |
| | 332CCS-3 | Operating Systems | Required | 211CCS-4 | 3 | College |
| | 352CCS-3 | Human and Computer Interaction | Required | No | 3 | Department |
| | 313CCS-3 | Programming Paradigm | Required | 212CCS-4 | 3 | Department |
| | 287MATH-3 | Numerical Methods | Required | No | 3 | Department |
| Level 7 | 424CCS-3 | Algorithm Design and Analysis | Required | 321CCS-3 | 3 | Department |
| | 285STAT-3 | Probabilities and Engineering Statistics | Required | No | 3 | College |
| | 451CCS-3 | Software Engineering | Required | 212CCS-3 | 3 | Department |
| | 423CCS-3 | Artificial Intelligence | Required | No | 3 | Department |
| | 417CCS-3 | Mobile Application Development | Required | 212CCS-4 | 3 | Department |
| | 414CCS-3 | Computer Graphics | Required | 211CCS-4, 284MATH-3 | 3 | Department |

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| Level 8 | 461CCS-3 | Data Communication and Computer Networks | Required | No | 3 | Department |
| | 425CCS-3 | Machine Learning | Required | 211CCS-4 | 3 | Department |
| | 422CCS-3 | Theory of Computation | Required | No | 3 | Department |
| | 343CIS-3 | Advance Database Systems | Required | 340CIS-3 | 3 | Department |
| Summ er Traini ng | 476CCS-4 | Field Training | Required | Minimum 60 Credit Hours Completed (excluding PYP) | 4 | Department |
| Level 9 | 516CCS-3 | Simulation and Molding | Required | No | 3 | Department |
| | 574CCS-3 | Special Topics in CS 1 | Required | No | 3 | Department |
| | 571CCS-2 | Graduation Project 1 | Required | 451CCS-3 | 2 | Department |
| | 562CCS-3 | Parallel and Distributed Systems | Required | No | 3 | Department |
| | 515CCS-3 | Internet Technologies | Required | No | 3 | Department |
| Level 10 | 553MATH-3 | Operational Research | Required | No | 3 | Department |
| | 563CCS-3 | Computer Security | Required | 461CCS-3 | 3 | Department |
| | 572CCS-3 | Graduation Project 2 | Required | 571CCS-2 | 3 | Department |
| | 573CCS-3 | Social, Ethical and Professional Issues | Required | No | 3 | Department |
| | 575CCS-3 | Special Topics in CS 2 | Required | 574CCS-3 | 3 | Department |

* Include additional levels if needed

** Add a table for each track (if any)