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| **8- Semester Curriculum Plan** |
|  | **Freshman Year (First Year)** |
| **Semester 1** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| ISC 101 | Intro to Inform. Systems | 3-0-3 | ELU 107 | GE-General Sciences |
| MATH 111 | Linear Algebra | 3-0-3 |  | GE-General Sciences |
| CLS 100 | Arabic Language | 3-0-3 |  | GE-Language & Communication Domain |
| CLS 109 | Statistics | 3-2-3 | ELU 097 | GE-General Sciences |
| CLS 130 | Ethics and Practices | 3-0-3 | ELU 097 | GE- Culture & Society Domain |
| **Semester 2** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| DSAI 102 | Intro. to data science and AI | 3-0-3 | CLS 109 | DSAI Core |
| ISC 112 | Discrete Structures for Information Sciences | 3-0-3 | ELU 107 | DSAI Core |
| ISC 140 | Prog & Problem solving | 3-2-3 | ELU 107 | DSAI Core |
| MATH 101 | Calculus | 3-0-3 | MATH 111 | DSAI Core |
| ELU 126 | Academic Writing & Research Skills | 3-0-3 | ELU 107 | GE-Language & Communication Domain |
|  | **Sophomore Year (Second Year)** |
| **Semester 3** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| STAT 210 | Introduction to Prob | 3-0-3 | CLS 109 | DSAI Core |
| ISC 220 | Database Systems I | 3-2-3 | ISC 140 | DSAI Core |
| ISC 244 | Application Development & Programming | 3-2-3 | ISC 140 | DSAI Core |
| DSAI 200 | Introduction to Artificial Intelligence | 3-2-3 | CLS 109 | DSAI Core |
| HIS 100 | Modern and Contemporary History of Kuwait (or equivalent for non-Arabic speakers) | 3-0-3 |  | GE- Culture & Society Domain |
| **Semester 4** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| STAT 240 | Statistical Methods | 3-1-3 | STAT 210 | DSAI Core |
| ISC 151 | Information Security and Cryptography | 3-2-3 | ISC 112 | DSAI Core |
| ISC 230 | IT Infrastructure | 3-3-4 | ISC 101 | DSAI Core |
| DSAI 242 | Data Acquisition & Management | 3-0-3 | DSAI 102 | DSAI Core |
| ELU 146 | Academic Oral Skills | 3-0-3 | ELU 126 | GE-Language & Communication Domain |

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| **8- Semester Curriculum Plan** |
|  | **Junior Year (Third Year)** |
| **Semester 5** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| ISC 245 | Data Structures & Algorithms | 3-2-3 | ISC 244 and MATH 111 | DSAI Core |
| DSAI 343 | Data Mining | 3-2-3 | STAT 240 and DSAI 200 | DSAI Core |
| DSAI 345 | Data Analytics and Visualization | 3-2-3 | DSAI 242 | DSAI Core |
| DSAI 346 | Data and Artificial Intelligence Ethics | 3-0-3 | DSAI 242 | DSAI Core |
| xxx | General Elective (GE) | 3 |  | GE- Leadership Competency Domain |
| **Semester 6** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| STAT 342 | Time Series and Forecasting | 3-0-3 | STAT 240 | DSAI Core |
| DSAI 344 | Big Data Systems | 3-0-3 | DSAI 242 | DSAI Core |
| DSAI 347 | Software Development for Data Science Projects | 3-0-3 | DSAI 345 and DSAI 343 | DSAI Core |
| DSAI 348 | Machine Learning | 3-2-3 | DSAI 343 | DSAI Core |
| xxx | DSAI Elective 1 | 3 |  | DSAI Electives |
|  | **Senior Year (Fourth Year)** |
| **Semester 7** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| DSAI 442 | Enterprise Data Analytics | 3-0-3 | DSAI 347 and DSAI 348 | DSAI Core |
| DSAI 446 | Deep Learning | 3-2-3 | DSAI 348 | DSAI Core |
| DSAI 496 | Capstone Requirements Development | 3-0-3 | DSAI 347 | DSAI Core |
| xxx | DSAI Elective 2 | 3 |  | DSAI Electives |
| xxx | General Elective (GE) | 3 |  | GE- Culture & Society Domain |
| **Semester 8** | **Course #** | **Title** | **LE-LB-CR** | **Prerequisite** | **Category** |
| ISC 495 | Internship  | 3 | Min 90 credits & Dept Approval | DSAI Core |
| DSAI 497 | Capstone Design Implementation | 3-0-3 | DSAI 496 | DSAI Core |
| xxx | General Elective (GE) | 3 |  | GE-General Sciences |
| xxx | DSAI Elective 3  | 3 |  | DSAI Electives |
| xxx | Free Elective  | 3 |  | Free Elective |