**Bachelor of Science in Computer Science – AI & Data Science**

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| **FIRST SEMESTER (EVEN)** | | | | | **SECOND SEMESTER (ODD)** | | |
| **Proposed Courses** | | **Sem/Yr** | **Grade** | **Proposed Courses** | | **Sem/Yr** | **Grade** |
| **CS** **121** – Computer Science I [4] | |  |  | **CS** **122** – Computer Science II [4] | |  |  |
| **EN 100** – PLE Writing & Language [4] | | **PLE Core** |  | **MA 121** – Calculus I [4] | | **MA Core** |  |
| **FYS 100** – First Year Seminar [4] | |  |  | **MA** **251** –Probability and Statistics [4] | |  |  |
| **MA 120** – Foundations of Calc [4] | |  |  | **Core** **Course** or **Elective** | |  |  |
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| **THIRD SEMESTER (ODD)** | | | | **FOURTH SEMESTER (EVEN)** | | | |
| **Proposed Courses** | | **Sem/Yr** | **Grade** | **Proposed Courses** | | **Sem/Yr** | **Grade** |
| **CS 209** – Database Systems [4] | |  |  | **CS 222** – Systems Programming [4] | |  |  |
| **CS 221** – Data Structures [4] | |  |  | **CS 230** – Comp Architecture [4] | |  |  |
| **CS 250** – Foundations AI & DS [4] | |  |  | **MA 135** – Applied Discrete Math [4] | |  |  |
| **Core** **Course** or **Elective** | |  |  | **Core** **Course** or **Elective** | |  |  |
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| **FIFTH SEMESTER (EVEN)** | | | | **SIXTH SEMESTER (ODD)** | | | |
| **Proposed Courses** | | **Sem/Yr** | **Grade** | **Proposed Courses** | | **Sem/Yr** | **Grade** |
| **CS 296 –** Professional Dev Seminar [1] | |  |  | **CS** **322** – Algorithms [4] | |  |  |
| **CS 341 –** Software Engineering [4] | | **SLE #1** |  | ***CS******354 –*** *Big Data* [4] | |  |  |
| ***CS 350*** *– DM to Deep Learning* [4] | |  |  | **CS 396 –** Industry & Special Topics Sem [1] | |  |  |
| **MA 252 –** Stats Methods in Research[4] | |  |  | **Core** **Course** or **Elective** | |  |  |
| **PH 263** – Societal Imp of Computing [4] | | **HUM Core** |  | **Core** **Course** or **Elective** | |  |  |
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| **SEVENTH SEMESTER (ODD)** | | | | **EIGHTH SEMESTER (EVEN)** | | | |
| **Proposed Courses** | | **Sem/Yr** | **Grade** | **Proposed Courses** | | **Sem/Yr** | **Grade** |
| **CS 401** – Capstone Project in Comp I [2] | |  |  | **BA 260** – Data Visualization [2] | |  |  |
| **CS 421** – Prog Lang Design & Imp [4] | |  |  | **CS 358 – Machine Learning** [2] | |  |  |
| **Core Course or Elective** | |  |  | **CS 402** – Capstone Project in Comp II [2] | | **SLE #2** |  |
| **Core Course or Elective** | |  |  | **CS** **422** – Operating Systems [4] | |  |  |
|  | |  |  | **Core Course or Elective** | |  |  |
| **Transfer Credits** |  | | | | | | |
| **TOTAL CREDITS** |  | | | | | | |

*Note: Italicized courses are offered every other year*