|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| \*\* Offered in Both Semesters | | | | BSc component of combined degree (minimum 12 units) |
| *Year 1*  *Semester 1*  *2022* | BE Unit | BE Unit | BE Unit | **CITS1001\*\***  Software Engineering with Java |
| *Year 1*  *Semester 2*  *2022* | BE Unit | BE Unit | BE Unit | **CITS1402**  Relational Database Management System |
| *Year 2*  *Semester 1*  *2023* | BE Unit | BE Unit | **CITS1003**  Intro to Cybersecurity | **CITS2200**  Data Structures & Algorithms  ***Prereq: CITS1001*** |
| *Year 2*  *Semester 2*  *2023* | BE Unit | BE Unit | **CITS2211**  Discrete Structures  ***Prereq: 6 pts programming-based units ‡*** | **CITS2002**  Systems Programming  ***Prereq: 6 pts programming-based units ‡*** |
| *Year 3*  *Semester 1*  *2024* | BE Unit | BE Unit | BE Unit | **CITS3403**  Agile Web Development  ***Prereq: CITS1001 or CITS2002*** |
| *Year 3*  *Semester 2*  *2024* | BE Unit | BE Unit | BE Unit | **CITS3001**  Algorithms, Agents & AI  ***Prereq: CITS2200*** |
| *Year 4*  *Semester 1*  *2025* | BE Unit | BE Unit | BE Unit | **CITS3002**  Computer Networks  ***Prereq: CITS2002*** |
| *Year 4*  *Semester 2*  *2025* | BE Unit | BE Unit | BE Unit | **CITS3200**  Professional Computing  ***Prereq: 84 pts incl CITS1001, CITS2200 &***  ***CITS2002*** |
| *Year 5*  *Semester 1*  *2026* | BE Unit | BE Unit | BE Unit | **CS Option #** |
| *Year 5*  *Semester 2*  *2026* | BE Unit | BE Unit | BE Unit | **CS Option #** |

Additionally, students must complete GENG1000, GENG2000 & GENG3000 Engineering Practice Skills (0 pts = 3 x 1week modules) and GENG5010 Professional Eng. Portfolio (0 pts)

# # Computer Science Option Units: Take units to the value of 12 points from this group:

|  |  |  |  |
| --- | --- | --- | --- |
| **CITS3003** (S1)  Graphics and Animation  ***Prereq: CITS1001 or CITS2002*** | **CITS3005** (S2)  Knowledge Representation  ***Prereq: CITS2200 and CITS2211*** | **CITS3007** (S2)  Secure Coding  ***Prereq: 12 points of programming-based units ‡*** | **CITS3402** (S2)  High Performance Computing  ***Prereq: CITS2002*** |

***‡*** *Programming-based units include: CITS1001 Software Engineering with Java; CITS1401 Computational Thinking with Python; CITS2002 Systems Programming; CITS2200 Data* Structures and Algorithms; CITS2401 Computer Analysis and Visualisation; CITS2402 Introduction to Data Science; and CITS4009 Computational Data Analysis.

# Cross-credit arrangements

* **BE(Hons) Automation and Robotics Engineering Major and BSc Computer Science Major: CITS1001, CITS2002, CITS2200 and CITS3001** count towards both the BE(Hons) and BSc component: students must take these units and four additional electives or other units required by their course of study.
* **BE(Hons) Biomedical Engineering Major and BSc Computer Science Major: CITS1001** counts towards both the BE(Hons) and BSc component: students must take CITS1001 and one additional elective or other unit required by their course of study.

# Additional Information: Incompatibility

The BSc Computer Science major may not be taken in combination with the BE(Hons) Software Engineering major.

# Further Help

If you need to discuss your study plan further, please contact the [EMS Student Office](https://www.uwa.edu.au/students/my-course/study-areas/ems-students)