

# Progression Checklist 8543 – Information Technology Data Science and Engineering

## 8543 - Information Technology - Data Science and Engineering 96 UoC

## **Program Structure**

Students must complete 36 UoC of Core Courses

Students must complete 30 UoC of Prescribed Electives. Note that students can take a maximum of 12 UOC of courses from outside the School of Computer Science and Engineering. (If MATH5836 is selected as a prescribed elective, only an additional 6 UOC of courses can be chosen from the Non-Computing Elective List).

Students must complete 36 UoC of Disciplinary Electives

At least 36 UoC courses chosen must be taken from the Advanced Disciplinary Knowledge Course List

| selected.  |               |                       |                             |  |  |  |  |
|--|---------------|-----------------------|-----------------------------|--|--|--|--|
| Course   | UoC           | ADK Course?           | Complete?                   |  |  |  |  |
| Core Courses / 36 UoC  |               |                       |                             |  |  |  |  |
| COMP9021   | 6             |                       |                             |  |  |  |  |
| COMP9024   | 6             |                       |                             |  |  |  |  |
| COMP9311   | 6             |                       |                             |  |  |  |  |
| COMP9331   | 6             |                       |                             |  |  |  |  |
| COMP9900   | 6             | Υ                     |                             |  |  |  |  |
| GSOE9820   | 6             |                       |                             |  |  |  |  |
| UoC Sub Total  | 36            |                       |                             |  |  |  |  |
| Electives / 54 UoC   |               |                       |                             |  |  |  |  |
| Prescribed Electives / 30 Uc                                     | oC of Prescri | bed Electives must be | e taken                     |  |  |  |  |
| 12 UOC must be chosen from any 2 lists and a                     | further 6 UO  | C must be chosen fro  | m the remaining third list. |  |  |  |  |
| Algorithms and Statistics  |               |                       |                             |  |  |  |  |
| COMP4141   | 6             |                       |                             |  |  |  |  |
| COMP6741   | 6             | Υ                     |                             |  |  |  |  |
| MATH5845   | 6             |                       |                             |  |  |  |  |
| MATH5855   | 6             |                       |                             |  |  |  |  |
| MATH5905   | 6             |                       |                             |  |  |  |  |
| MATH5960   | 6             |                       |                             |  |  |  |  |
| Databases and Data Mining  |               |                       |                             |  |  |  |  |
| COMP9313   | 6             |                       |                             |  |  |  |  |
| COMP9315   | 6             | Υ                     |                             |  |  |  |  |
| COMP9318   | 6             | Υ                     |                             |  |  |  |  |
| COMP9319   | 6             | Υ                     |                             |  |  |  |  |
| COMP9321   | 6             |                       |                             |  |  |  |  |
| Machine Learning, Information Retrieval, Kowledge Representation |               |                       |                             |  |  |  |  |
| COMP4418   | 6             | Υ                     |                             |  |  |  |  |
| COMP6714   | 6             | Υ                     |                             |  |  |  |  |
| COMP9417   | 6             | Υ                     |                             |  |  |  |  |
| COMP9444   | 6             | Υ                     |                             |  |  |  |  |
| MATH5836   | 6             | Υ                     |                             |  |  |  |  |
| UoC Sub Total  | 30            |                       |                             |  |  |  |  |

# Disciplinary Electives / 36 UoC of Disciplinary Electives must be taken The full list of Disciplinary Electives can be found in the handbook The selection listed below is a sample of courses that overlap with other specialisation requirements COMP4141 6 COMP9313 6 COMP9321 6 GSOE9820 6 UoC Sub Total 36 Non-Computing Electives / A maximum of 12 HoC of Non-Computing Electives can be taken

| Non-Computing Electives / A maximum of 12 UoC of Non-Computing Electives can be taken                  |                   |    |   |  |  |  |
|--|-------------------|----|---|--|--|--|
| The full list of Non-Computing Electives can be found in the handbook.                                 |                   |    |   |  |  |  |
| The selection listed below is a sample of courses that overlap with other specialisation requirements. |                   |    |   |  |  |  |
| MATH5836   |                   | 6  | Υ |  |  |  |
| GE0S9016   |                   | 6  | Υ |  |  |  |
|  | Total Program UoC | 96 |   |  |  |  |
| Please check the handbook and latest timetable to confirm current course offerings and requirements    |                   |    |   |  |  |  |
|  |                   |    |   |  |  |  |

### **Project Option / 6 - 18 UoC**

## Students have the option of completing 6 - 18 UoC of project courses

(COMP9900 - 6 UoC Total) OR

(COMP9991 **AND** COMP9992 - 12 UoC Total) **OR** (COMP9991 **AND** COMP9993 - 18 UoC Total)

| Advanced Disciplinary Knowledge Courses (ADK) 36 of the total UoC for this degree must be taken from the Advanced Disciplinary Knowledge Course List below |     |           |  |  |  |  |
|--|-----|-----------|--|--|--|--|
| Course   | UoC | Complete? |  |  |  |  |
| COMP4418   | 6   | Complete: |  |  |  |  |
| COMP6714   | 6   |           |  |  |  |  |
| COMP6741   | 6   |           |  |  |  |  |
| COMP9315   | 6   |           |  |  |  |  |
| COMP9318   | 6   |           |  |  |  |  |
| COMP9319   | 6   |           |  |  |  |  |
| COMP9417   | 6   |           |  |  |  |  |
| COMP9444   | 6   |           |  |  |  |  |
| COMP9900   | 6   |           |  |  |  |  |
| GEOS9016   | 6   |           |  |  |  |  |
| MATH5836   | 6   |           |  |  |  |  |
| COMP4121   | 6   |           |  |  |  |  |
| COMP4161   | 6   |           |  |  |  |  |
| COMP6445   | 6   |           |  |  |  |  |
| COMP6447   | 6   |           |  |  |  |  |
| COMP6448   | 6   |           |  |  |  |  |
| COMP6452   | 6   |           |  |  |  |  |
| COMP6721   | 6   |           |  |  |  |  |
| COMP6733   | 6   |           |  |  |  |  |
| COMP6752   | 6   |           |  |  |  |  |
| COMP6771   | 6   |           |  |  |  |  |
| COMP6845   | 6   |           |  |  |  |  |
| COMP6991   | 6   |           |  |  |  |  |
| COMP9153   | 6   |           |  |  |  |  |
| COMP9242   | 6   |           |  |  |  |  |
| COMP9243   | 6   |           |  |  |  |  |
| COMP9312   | 6   |           |  |  |  |  |
| COMP9323   | 6   |           |  |  |  |  |
| COMP9334   | 6   |           |  |  |  |  |
| COMP9336   | 6   |           |  |  |  |  |
| COMP9337   | 6   |           |  |  |  |  |
| COMP9418   | 6   |           |  |  |  |  |
| COMP9434   | 6   |           |  |  |  |  |
| COMP9491   | 6   |           |  |  |  |  |
| COMP9517   | 6   |           |  |  |  |  |
| COMP9727   | 6   |           |  |  |  |  |
| COMP9991   | 6   |           |  |  |  |  |
| COMP9992   | 6   |           |  |  |  |  |
| COMP9993   | 12  |           |  |  |  |  |
| GMAT9600   | 6   |           |  |  |  |  |
| UoC Total  | 36  |           |  |  |  |  |