3.1.1 Structure of Programme

Students are required to complete five essential modules and a one-year professional consulting capstone project, as well as to complete elective modules from at most two vertical sectors. The essential modules build a cross-disciplinary foundation for business analytics, enabling students to engage in rigorous inquiry within and beyond assumed disciplinary borders. These modules are each of 4 modular credits. They are:

- DSC5103 - Statistics
- BDC5101 – Deterministic Operations Research
- BT5110 – Data Management and Warehousing
- BT5152 – Decision Making Technology for Business
- DCS5101 – Analytics in Managerial Economics

Business Analytics Capstone Project

The project has 12 modular credits. It investigates, analyzes and provides solutions to real-world business analytic problems. It enables students to become constructive and responsible members of a community and global citizens, with an appreciation of real-world analytics problems, and the skill set required to offer sound solutions. Students are required to attend a series of industry seminars, and classes in developing their project management and communication skills. A major activity in this project is a three-month internship between May and August.

Elective Modules in Vertical Sectors

Students are required to take three elective modules from at most two vertical sectors. The vertical sectors provide students with a deep understanding of different analytic techniques required for different vertical industry sectors. Importantly, building on the knowledge, concepts and skills imparted from the essential modules, the elective modules from selected verticals will enable students to become BA specialists who can apply relevant BA techniques and tools in specific vertical domains, as well as innovate, devise and refine new BA techniques and tools appropriate to solving complex or emerging BA issues and problems.

The vertical sectors offered in this academic year are given below:

- Big-data analytics techniques (offered mainly by School of Computing)
- Consumer data analytics (offered jointly by School of Computing and NUS Business School)
- Financial and risk analytics (offered mainly by NUS Business School)
- Healthcare analytics (offered mainly by Saw Swee Hock School of Public Health)
- Statistical modelling (offered by Faculty of Science)