

Module Content

The module will include the following:

- Definitions and sources of “Big Data” and its importance to business, illustrated through examples and business cases;
- Advanced analytical techniques, such as cluster analysis, crowdsourcing, statistical inference, sentiment analysis, data mining, visualisation, user-driven dashboards, etc.
- Technologies and tools for analytics;
- Information management, security, privacy, ethics, compliance, auditing and protection in the context of Big Data;
- “Best practices” in business intelligence and analytics;
- Current research and “hot topics” in business intelligence and analytics.

Module Learning Learning & Teaching Methods and Teaching

The module will use the learning through the “researching and doing” approach, based in computerlabs. Where appropriate, guest lectures will be included to provide industry perspective, along with access to appropriate realworld situations and data. Students will be required to research and read widely on the subject, and where possible use their personal experiences from work placements. Students will be encouraged to meet analytics staff responsible for the delivery of mission critical analytics services and explore the challenges and opportunities of analytics delivery within a business.

Lab based Seminars	12 hours
Lab based Workshops	24 hours
Student managed learning:	164 hours
Total:	200 hours

Methods

Scheduled learning and teaching activities:	18%
Guided independent study:	82%
Placement/study abroad:	0%

Module Assessment Method

CW1: A portfolio of work equivalent to 4000 words which will allow the students to demonstrate their understanding and application of the key elements of advanced analytics in line with the learning outcomes.

Reading list

Golbeck, J, (2013) **Analyzing the Social Web**, Elsevier
 Minelle, M., Chambers, M. and Dhiraj, A. (2013) **Big Data Big Analytics**, John Wiley and Sons
 Ohlhorst, F.J. (2013) **Big Data Analytics: Turning Big Data into Big Money**, John Wiley and Sons

OTHER RESOURCES

Eckerson, W. (2011) **Performance Dashboards: Measuring, Monitoring and Managing your Business** (2nd Ed.), John Wiley and Sons