IB3K5-15 Artificial Intelligence for Business

21/22

Department
>Warwick Business School

Level
>Undergraduate Level 3

Module leader
>Yang Yang

Credit value
>15

Module duration
>10 weeks

Assessment
>100% coursework

Study location
>University of Warwick main campus, Coventry

Description

Introductory description

This is an elective module available for WBS and non-WBS students.

This course equips students with fundamental knowledge in approaches for reaping strategic value from data/knowledge assets and building data-driven decision making capacity in organisations. Principles for adopting effective enterprise data management systems and interfaces, and for mounting key business intelligence practices (e.g. customer relationship management, knowledge management, business performance
management, data analytics, data mining, dashboards, etc) are critically reviewed, in order to obtain a sound appreciation of salient success factors affecting the use of enterprise data/knowledge and external data sources for decision-making and achieving competitive advantage.

[Module web page](#)

Module aims

By providing understanding/insight for decision-making via access to structured data & knowledge assets across the enterprise as well as unstructured data throughout the internet and sensory

technologies, data analytics enables an organisation to sense & respond to the demands of its operating environment.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Strategic nature and application of business intelligence practices and enterprise data management technologies in contemporary organisations.
Management of data warehousing and business intelligence practices.
Business Analytics applications and tools.
Business intelligence practices: knowledge management, customer relationship mgt. and supply chain management (CRM/SCM), business performance management, data mining.
Challenges in enterprise data/knowledge management: the case of dashboards.

Learning outcomes

By the end of the module, students should be able to:

- Understand the strategic nature of enterprise data knowledge management technologies and data analytics practices.
- Understand the strategic significance of the BI and Business Analytics systems, and the managerial issues associated with the selection and adoption of such data and manipulation technologies.

Indicative reading list

- Akerkar, R. (2019). Artificial Intelligence for Business. Springer.
- Mohanty, S. and Vyas, S. (2018). How to Compete in the Age of Artificial Intelligence. Apress.
- Yao, M., Jia, M., Zhou, A. (2018). Applied Artificial Intelligence: A Handbook for Business Leaders. TOPBOTS.
- Russell, S., Norvig, P. (2020). Artificial Intelligence A Modern Approach. Pearson, 4th Edition.
- Albright, S.C., Winston, W.L. (2014). 5th ed. Business Analytics: Data Analysis & Decision Making. Cengage Learning.

Subject specific skills

Understand the managerial and organisational issues associated the use of data and business analytics systems and enterprise business intelligence practices.

Transferable skills

Know how to recommend management policies and measures to enable an organisation to exploit data/knowledge assets and information technologies effectively

Study

Study time

Type	Required
Lectures	10 sessions of 2 hours (13%)
Seminars	9 sessions of 1 hour (6%)
Private study	48 hours (32%)
Assessment	73 hours (49%)
Total	150 hours

Private study description

Private Study.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A2

	Weighting	Study time
Individual Assignment (15 CATS)	70%	51 hours
Group Presentation (15 CATS)	30%	22 hours

Feedback on assessment

Feedback will be provided via my.wbs.

Availability

Courses

This module is Optional for:

- UIBA-MN34 Law and Business Four Year (Qualifying Degree)

- ○ Year 3 of MN34 Law and Business Studies Four Year (Qualifying Degree)
  - ○ Year 4 of MN34 Law and Business Studies Four Year (Qualifying Degree)
- UECA-3 Undergraduate Economics 3 Year Variants
  - ○ Year 3 of L100 Economics
  - ○ Year 3 of L100 Economics
  - ○ Year 3 of L100 Economics
  - ○ Year 3 of L116 Economics and Industrial Organization
  - ○ Year 3 of L116 Economics and Industrial Organization
- UECA-4 Undergraduate Economics 4 Year Variants
  - ○ Year 4 of L103 Economics with Study Abroad
  - ○ Year 4 of LM1H Economics, Politics & International Studies with Study Abroad
  - ○ Year 4 of LM1H Economics, Politics & International Studies with Study Abroad
- UECA-LM1D Undergraduate Economics, Politics and International Studies
  - ○ Year 3 of LM1D Economics, Politics and International Studies
  - ○ Year 3 of LM1D Economics, Politics and International Studies
- Year 3 of UIBA-MN31 Undergraduate Law and Business Studies
- Year 3 of UIBA-MN32 Undergraduate Law and Business Studies
- UIBA-MN35 Undergraduate Law and Business Studies with Intercalated Year (3+1)
  - ○ Year 3 of MN35 Law and Business Studies with Intercalated Year (3+1)
  - ○ Year 4 of MN35 Law and Business Studies with Intercalated Year (3+1)