H7BID: Business Intelligence and Data Warehousing I

Module Code:	H7BID
Long Title	Business Intelligence and Data Warehousing I APPROVED
Title	Business Intelligence and Data Warehousing I
Module Level:	LEVEL 7
EQF Level:	6
EHEA Level:	First Cycle
Credits:	5
Module Coordinator:	Simon Caton
Module Author:	Simon Caton
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	**Learning Outcome Description**
LO1	Generalise enterprise data in order to produce organised business reports.
LO2	Identify and distinguish compositions of enterprise data that yield value through business intelligence approaches
LO3	Evaluate and apply OLAP methodologies and techniques with respect to inferring business value from enterprise data
LO4	Evaluate vendor solutions for business intelligence in the context of data warehousing.

Dependencies
Module Recommendations
No recommendations listed
Co-requisite Modules
No Co-requisite modules listed

Entry requirements	

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Module Content & Assessment

Indicative Content
Foundations of Business Intelligence and Data Warehousing • Defining Business Intelligence and its Application Areas. • Data Warehousing Fundamentals: Inmon's and Kimbel's Approaches. • Data Warehouse Architectures (e.g. Enterprise Data Warehouse, Federated, Enterprise Service Bus, etc.) • Data Models Kimbel's Front and Back Room Analogy
Analytics for Business Intelligence • Online Analytical Processing (OLAP). • OLAP. • Cube Building. • OLAP operations (e.g. Slice, Dice, Roll Up, Drill Down). • Vendor Solutions and Tools for OLAP. • Foundations of Data Mining for Business Intelligence.
Visualisation and Reporting • Business Reporting. • End User Dashboards. • Deriving Value from Business Data Reporting Tools and Vendor Solutions.

Assessment Breakdown	%
Coursework	40.00%
End of Module Assessment	60.00%

Assessments

Full Time

Coursework

Assessment Type:	Continuous Assessment (0200)	**% of total:**	40
Assessment Date:	n/a	**Outcome addressed:**	3,4
Non-Marked:	No		

Assessment Description:
Sample Assessments: Learners will apply practical skills developed throughout the module to undertake and simulate business intelligence applications and/or case studies. Learners may also be required to develop and evaluate reporting methods.

End of Module Assessment

Assessment Type:	Terminal Exam	**% of total:**	60
Assessment Date:	End-of-Semester	**Outcome addressed:**	1,2,3,4
Non-Marked:	No		

Assessment Description:
End-of-Semester Final Examination

No Workplace Assessment

Reassessment Requirement

Repeat examination
Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.

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Module Workload

Module Target Workload Hours 0 Hours

Workload: Full Time

Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecture	No Description	2	Every Week	2.00
Tutorial	No Description	1	Every Week	1.00
Independent Learning	No Description	7.5	Every Week	7.50
			Total Weekly Contact Hours	3.00

Workload: Part Time

Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecture	No Description	2	Every Week	2.00
Practical	No Description	2	Every Week	2.00
Independent Learning	No Description	7.5	Every Week	7.50
			Total Weekly Contact Hours	4.00

Module Resources

Recommended Book Resources

Cindi Howson. (2013), Successful Business Intelligence: Unlock the Value of BI & Big Data, 2. Mcgraw-Hill Osborne Media, p.320, [ISBN: 9780071809184].

Foster Provost and Tom Fawcett. (2013), Data Science for Business: What you need to know about data mining and data-analytic thinking, O'Reilly Media, p.414, [ISBN: 9781449361327].

Supplementary Book Resources

Eric Siegel. (2013), Predictive Analytics, Wiley, p.288, [ISBN: 9781118356852].

W. H. Inmon. (2005), Building the data warehouse, 4. Wiley, Indianapolis, Ind., p.576, [ISBN: 9780764599446].

Ralph Kimball... [et al.]. (2008), The data warehouse lifecycle toolkit, Wiley Pub., Indianapolis, IN, [ISBN: 9780470149775].

This module does not have any article/paper resources

Other Resources

[Website], Microsoft. Multi-dimensional modelling tutorial, http://msdn.microsoft.com/en-us/library/ ms170208.aspx

Discussion Note:	