Business Analytics

Introduction

The Business Analytics Program is designed for individuals passionate about data and with strong critical thinking skills. This degree, developed by the School of Information Systems, equips students with the ability to collect, manage, and analyze data to solve real-world business challenges. With a focus on applied learning and hands-on experience, students learn to use the latest technologies and tools to unlock the full potentials of data, creating value for companies and society. This program is perfect for those who want to enhance their business performance, make smart management decisions, and positively impact the corporate world.

Vision

A world class information system study program specialized in IT-business, recognized internationally, and champions innovation for fostering and empowering the society.

Mission

The missions of Business Analytics are:

1. Nurturing students and lecturers with creative and value-adding talents in Information System by creating a suitable environment;
2. Educating students in information systems, covering knowledge and skills in analyzing, designing and implementing information systems for improving business processes and to be able to create an innovative and valuable information system solution, through intensive learning process, research activities and collaboration with global industries;
3. Providing integrated knowledge to pursue further studies and create outstanding professionals, entrepreneurs, and leaders for a global community;
4. Providing professional services in Information Systems with an emphasis on the application of knowledge to society;
5. Fostering the quality of life of Indonesians and the international community through leveraging Information system solutions.

Program Objective

The objectives of the program are to:

1. Program graduates will possess effective communication, teamwork, and leadership skills with ethical considerations in solving problems for an organization and creating benefits for society.
2. Program graduates will apply accurate skills and knowledge in system development that will be needed as a professional in information systems.
3. Program graduates will maintain in-depth knowledge of information system methodologies and technologies to address the critical needs of an organization.

Student Outcomes

After completing the study, graduates are:

1. Able to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions;
2. Able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline;

3. Able to communicate effectively in a variety of professional contexts;
4. Able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles;
5. Able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline;
6. Able to support the delivery, use, and management of information systems within an information systems environment.

Prospective Career of the Graduates

Graduates will have the necessary skills to work as:

1. Data business analyst
2. Data analytics consultant
3. Decision science consultant
4. Technology consultant
5. Management consultant
6. Customer data analyst
7. Quantitative modeler
8. Data architect
9. Market research analyst
10. Web analyst
11. Social media data analyst
12. Supply chain analyst
13. Human resource analyst
14. Marketing analyst
15. Risk analyst

Curriculum

The Business Analytics curriculum is designed based on recommendations from the Association for Computing Machinery (ACM) and the Association for Information Systems (AIS) for undergraduate degree programs in Business Analytics. It is also influenced by renowned foreign universities known for their qualified Business Analytics programs. Students will learn to apply their data analysis skills to solve business problems in marketing, finance, and economics. They will use industry-standard tools to gain insights through analytics.

This program provides students with a robust foundation in data analytics, encompassing both data analytics and programming principles. It offers a comprehensive understanding of how analytics are applied across various industrial domains. Students will develop essential teamwork skills to achieve common objectives and will gain a deep understanding of the professional, ethical, legal, security, and social responsibilities inherent to analytics professionals. Furthermore, they will be equipped to assess data analytics' local and global impact on individuals, organizations, and society.

Course Structure

Sem	Code	Course Name	SCU	Total
1	CHAR6013003	Character Building: Pancasila	2	20
	ISYS6896003	Information Systems Management, Strategy and Acquisition[1]	4	
	ISYS6901003	Enterprise Business Process[2] - **(AOL)**	4	
	ISYS6596003	User Experience Research and Design[2] - **(AOL)**	4/2	
	ISYS6898003	Algorithm and Programming - **(AOL)**	2/2	
	Foreign Language Courses		0	
2	CHAR6014003	Character Building: Kewarganegaraan	2	20
	ISYS6892003	Database Fundamental[1&2] - **(AOL)**	4/2	

Sem	Code	Course Name	SCU	Total
	ISYS6897003	Digital Innovation - **(AOL)**	2	
	ISYS6894003	IT Infrastructure & Emerging Technology	4	
	ISYS6900003	IT Governance & Security[2]	4	
	COSC6011003	Foundations of Artificial Intelligence	2	
	Foreign Language Courses		0	
3	CHAR6015003	Character Building: Agama	2	20
	LANG6027003	Indonesian	2	
	ISYS6198003	Data and Information Management[2] - **(AOL & AIE)**	4	
	COSC6050003	Programming for Business	2/2	
	ISYS6893003	Information Systems Analysis and Design[2] - **(AOL)**	4/2	
	ISYS6338003	Testing and Systems Implementation[1] - **(AOL)**	2	
	Foreign Language Courses		0	
4	ENPR6311001	Creativity and Innovation	2	22
	ISYS6895003	Data Modelling	2/2	
	ISYS6256003	Information Systems Project Management[1&2] - **(AOL)**	4	
	ISYS6902003	Research Methods in Information Systems - **(AIE)**	4	
	ISYS6908003	Business Analytics Fundamental[1]	4	
	ISYS6928003	Visual Analytics	4	
	Foreign Language Courses		0	
5	ENPR6312001	Venture Creation	2	18
	ISYS6899003	Minor Project in Information Systems - **(AOL & AIE)**	4	
	ISYS6932003	Enterprise Data Warehouse	4/2	
	ISYS6933003	Enterprise Analytics[2]	4	
	ISYS6934003	Decision Analytics	2	
6	**Enrichment Program I**		20	20
7	**Enrichment Program II**		20	20
8	ISYS6625003	Pre-Thesis	2	6
	ISYS6626003	Thesis	4	
	ISYS6117003	Thesis	6	
				Total Credits 146 SCU

1) This course is delivered in English
2) Global Learning System course

-) **AOL** - *Assurance of Learning Process System*
-) **AIE** - *Artificial Intelligence Embedded Course*

Pre-thesis (2 SCU) & Thesis (4 SCU) *can be taken in the 6th and/or 7th semester by the students who meet the requirements from the Study Program/Program.*

Appendix Foreign Language Courses

Foreign language courses are personalized courses that can be taken by the students according to their own pace from semester 1 until semester 4 or before they take enrichment. The courses are available at BINUSMAYA – Beelingua. Students must pass with a minimum Grade of C.

The following are the provisions of the courses that must be taken by students:

Foreign Language Courses		SCU
ENGL6253003	English for Frontrunners	0
ENGL6254003	English for Independent Users	0
ENGL6255003	English for Professionals	0
JAPN6190003	Basic Japanese Language*	0
CHIN6163003	Basic Chinese Language*	0

**) This course is optional for students*

1. *Students with Beelingua Placement Test score less than 60 are required to take English for Frontrunners and English for Independent Users.*
2. *Students with Beelingua Placement Test score between 61-99 are required to take English for Independent Users and English for Professionals.*
3. *Students with Beelingua Placement Test score greater than 99 are required to take English for Professionals. Additionally, students may choose to take either Basic Japanese Language or Basic Chinese Language.*
4. *Students are required to pass the foreign language courses before they take enrichment.*
5. *Students can see the requirements to pass the foreign language courses at BINUSMAYA – Beelingua.*

Enrichment Track Scheme

Track	Semester 6							Semester 7							
	IN	RS	EN	CD	SA	IS	etc	IN	RS	EN	CD	SA	IS	FS	etc
1	v							v							
2	v								v						
3	v										v				
4	v											v			
5	v												v		
6	v													v	
7		v						v							
8		v							v						
9		v											v		
10		v												v	
11			v					v							
12			v						v						
13			v								v				
14			v									v			
15			v										v		
16			v											v	
17	v									v					
18		v								v					
19			v							v					
20				v						v					
21					v					v					
22						v				v					
23				v				v							
24				v					v						

Track	Semester 6							Semester 7							
	IN	RS	EN	CD	SA	IS	etc	IN	RS	EN	CD	SA	IS	FS	etc
25				v							v				
26				v									v		
27				v										v	
28					v			v							
29					v				v						
30					v						v				
31					v								v		
32					v									v	
33						v		v							
34						v			v						
35						v					v				
36						v								v	

Description:

IN : Company Internship
RS : Research Fellowship
EN : Entrepreneurship
CD : Community Impact Internship
SA : Study Abroad
IS : Specific Independent Study
FS : Fast Track
etc : Study Program Special Purposes

Note:
Student can choose one of the existing tracks

Company Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ISYS6215003	Experience in Industry	8	
ISYS6844003	Requirement and Solution for Information Systems	8	
COMM6703003	Business & Professional Communication	4	
Enrichment Program II			20
ISYS6347003	Professional Program in Industry	8	
ISYS6845003	Design and Evaluation for Information Systems	8	
BUSS6249003	Business Ethic and Social Responsibility	4	

Research Fellowship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
RSCH6275003	Research Experience	8	
RSCH6510003	Scientific Writing in Information Systems Research	8	
RSCH6460003	EES in Information Systems Research	4	
Enrichment Program II			20
RSCH6412003	Information Systems Research Experience	8	
RSCH6511003	Scientific Writing in Information Systems	8	
RSCH6414003	Global Employability and Entrepreneurial Skills in Information Systems Research	4	

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Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ENTR6949003	New Venture Initiation in Information Systems	8	
ENTR6596003	Product Development Process for Information Technology Business	8	
ENTR6950003	EES in New Information Systems Business I	4	
Enrichment Program II			20
ENTR6951003	Product Launching in Information Systems	8	
ENTR6597003	Business Development for Information Technology Business	8	
ENTR6952003	EES in New Information Systems Business II	4	

Community Impact Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
CMDV6156003	Community Outreach Project Implementation	8	
CMDV6289003	Community Outreach Project Design in Information Systems	8	
CMDV6259003	Employability and Entrepreneurial Skills in Information Systems Community	4	
Enrichment Program II			20
CMDV6260003	Community Development Project Implementation	8	
CMDV6290003	Community Development Project Design in Information Systems	8	
CMDV6262003	Employability and Entrepreneurial Skills in Information Systems Community Development	4	

Study Abroad Track

Code	Course Name	SCU	Total
Elective courses list for study abroad*			20
Enrichment Program I/II			
GLOB6005003	Elective Course for Study Abroad 1	4	
GLOB6006003	Elective Course for Study Abroad 2	4	
GLOB6007003	Elective Course for Study Abroad 3	4	
GLOB6008003	Elective Course for Study Abroad 4	4	
GLOB6009003	Elective Course for Study Abroad 5	2	
GLOB6010003	Elective Course for Study Abroad 6	2	
GLOB6011003	Elective Course for Study Abroad 7	2	
GLOB6012003	Elective Course for Study Abroad 8	2	
GLOB6013003	Elective Course for Study Abroad 9	2	
GLOB6014003	Elective Course for Study Abroad 10	2	
GLOB6015003	Elective Course for Study Abroad 11	2	
GLOB6016003	Elective Course for Study Abroad 12	2	

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Code	Course Name	SCU	Total
GLOB6251003	Elective Course for Study Abroad 29	4	

*) Transferred courses will be transferred based on credit transfer policies on study program with total of 20 credits.

Specific Independent Study

Code	Course Name	SCU	Total
Elective courses list for certified specific independent study*			
Enrichment Program I/II			
CSIS6001003	Course Certification	3	
CSIS6002003	Technical Skill Enrichment	4	
CSIS6003003	Industrial Project	9	
CSIS6004003	Soft Skill Enrichment	4	
CSIS6005003	Elective Course for Specific Independent Study 1	8	
CSIS6006003	Elective Course for Specific Independent Study 2	8	
CSIS6007003	Elective Course for Specific Independent Study 3	6	
CSIS6008003	Elective Course for Specific Independent Study 4	6	
CSIS6009003	Elective Course for Specific Independent Study 5	6	
CSIS6010003	Elective Course for Specific Independent Study 6	5	
CSIS6011003	Elective Course for Specific Independent Study 7	5	
CSIS6012003	Elective Course for Specific Independent Study 8	5	
CSIS6013003	Elective Course for Specific Independent Study 9	5	
CSIS6014003	Elective Course for Specific Independent Study 10	4	
CSIS6015003	Elective Course for Specific Independent Study 11	4	
CSIS6016003	Elective Course for Specific Independent Study 12	4	
CSIS6017003	Elective Course for Specific Independent Study 13	4	20
CSIS6018003	Elective Course for Specific Independent Study 14	4	
CSIS6019003	Elective Course for Specific Independent Study 15	3	
CSIS6020003	Elective Course for Specific Independent Study 16	3	
CSIS6021003	Elective Course for Specific Independent Study 17	3	
CSIS6022003	Elective Course for Specific Independent Study 18	3	
CSIS6023003	Elective Course for Specific Independent Study 19	3	
CSIS6024003	Elective Course for Specific Independent Study 20	3	
CSIS6025003	Elective Course for Specific Independent Study 21	2	
CSIS6026003	Elective Course for Specific Independent Study 22	2	
CSIS6027003	Elective Course for Specific Independent Study 23	2	
CSIS6028003	Elective Course for Specific Independent Study 24	2	
CSIS6029003	Elective Course for Specific Independent Study 25	2	
CSIS6030003	Elective Course for Specific Independent Study 26	2	
CSIS6031003	Elective Course for Specific Independent Study 27	2	
CSIS6032003	Elective Course for Specific Independent Study 28	2	
CSIS6033003	Elective Course for Specific Independent Study 29	1	
CSIS6034003	Elective Course for Specific Independent Study 30	1	
CSIS6035003	Elective Course for Specific Independent Study 31	1	

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Code	Course Name	SCU	Total
CSIS6036003	Elective Course for Specific Independent Study 32	1	

**) For students who take BINUS certified specific independent study courses, they should take the first 4 courses on the list above (20 credits). Meanwhile, electives courses 1 to 32 are transferred courses for students who take certified specific independent study outside BINUS University. Transferred courses will be transferred based on credit transfer policies on study program with total of 20 credits.*

Fast Track

Code	Course Name	SCU	Total
Enrichment Program II (Master of Management Information Systems: Information Systems Strategic Management Stream)			20
ISYS6829003	Digital Technology and Transformation	4	
ISYS6830003	Data Analytics for Business	6	
ISYS6831003	Applied Technology in Information Systems*	4	
ISYS6849003	Strategic Planning for Information Systems	6	
Enrichment Program II (Master of Management Information Systems: Digitalpreneurship Stream)			
ISYS6829003	Digital Technology and Transformation	4	
ISYS6830003	Data Analytics for Business	6	
ISYS6831003	Applied Technology in Information Systems*	4	
ISYS6848003	New Media Ventures and Innovation	6	

**) Students are required to obtain certification no later than the end of the first semester of the master's (S2) program, as outlined in the university's official guidelines. This certification will be transferred as an undergraduate (S1) course and reported in the seventh semester of the undergraduate program.*

Student should pass all of these quality controlled courses as listed below:

No	Course Code	Course Name	Minimal Grade
1.	CHAR6013003	Character Building: Pancasila	B
2.	ISYS6901003	Enterprise Business Process*	C
3.	ISYS6892003	Database Fundamental*	C
4.	ISYS6893003	Information Systems Analysis and Design*	C
5.	ISYS6198003	Data and Information Management	C
6.	ISYS6256003	Information Systems Project Management	C
7.	ENPR6312001	Venture Creation	C
8.	ISYS6899003	Minor Project in Information Systems	C

*) Tutorial