

## Industrial Engineering

### Introduction

Industrial engineering is a branch of engineering that focuses on describing, evaluating, designing, modifying, controlling, and improving the performance of integrated systems involving people, materials, and technology within their relevant context and over time. It combines fundamental knowledge in mathematics, physical, and engineering sciences with the principles and methods of engineering analysis and design. This field recognizes the central role of human beings in the complexity of such systems. With globalization increasing opportunities for service industries worldwide, there is a growing demand for industrial engineers. The industrial engineering curriculum at BINUS UNIVERSITY is designed to adapt to the globalization movement and meet the globalized world's needs.

The study program focuses on applying engineering fundamentals with an equal emphasis on theory, design, and practical experience. Computer applications are integrated throughout the curriculum. The Industrial Engineering department offers flexibility to students through three tracks: Supply Chain Engineering, Service Systems Engineering, and Manufacturing Systems Engineering. Some core courses require students to understand theoretical concepts and how to implement them in time study analysis. The Industrial Engineering facilities are well-equipped for engineering graphics, industrial engineering systems design, and human performance. Students have access to various laboratories such as the Physics Lab, Manufacturing Process Lab, Technical Drawing Lab, Simulation Lab, Work Design, and Ergonomics Laboratory.

### Vision

Becoming a world class industrial engineering study program through advanced system and industrial digital transformation to fostering and empowering the society in building and serving the nation

### Mission

The missions of Industrial Engineering Department are:

1. Developing excellent characters through holistic approach that meets global standards
2. Resolving the nation's issues in Industrial Engineering field study through high impact research
3. Fostering BINUSIAN as lifelong learners through self-enrichment in adapting to new system engineering and technology
4. Empowering BINUSIAN to continuously serve society-based needs through industrial engineering applied technology
5. Being the main driver to enrich the BINUS Higher Education system by using Industrial Engineering knowledge and technology.

### Program Objectives

The objectives of the program are to:

1. Utilize appropriate engineering design methods and tools that are principal to work beneficially within their professions & communities.
2. Possess effective teamwork and leadership skills and commit to the standard of profession and ethical practice.
3. Continuously develop oneself to meet the evolving demands and increasing responsibilities of a successful career, to benefit the organization and society.

**Student Outcomes**

After completing the study, graduates are:

1. Able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. Able to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. Able to communicate effectively with a range of audiences
4. Able to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. Able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. Able to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. Able to acquire and apply new knowledge as needed, using appropriate learning strategies

**Prospective Career of the Graduates**

Industrial engineers are employed in manufacturing and service industries. The type of work industrial engineers are doing are but not limited to:

1. Manufacturing Industry: Inventory Management, Logistics, Product Engineer, Operation Engineer, Safety Engineer, Maintenance Engineer, Production Engineer, Supply Chain Engineer, and Warehousing.
2. Research and Development: Data Analysis, Environmental Protection and Preservation, and Human Factors Engineer.
3. Service Industry: Data Engineer, Service Engineer, Client Management, Commercial Banking and Real Estate, Financial Consulting, Health Systems, and Human Resource Consulting.
4. Business and Management: Business Operation & Strategy, Investment Banking, Risk & Management Analysis, Project Management, and Business Development.
5. Education: Teaching, Research, and Consulting.
6. Information Technology: Computer Integration, Database Design & Engineer, Telecommunication, and Web Development.

**Curriculum**

The Industrial Engineering Program focuses on the design, modification, control, and improvement of complex systems. Therefore, a strong foundation in mathematics and computer science is essential for modeling and solving these systems. The curriculum is structured to ensure that students master various scientific fields, including mathematics, physics, humanities/social sciences, computer science and management, general engineering sciences, industrial engineering core, lab sciences, professional engineering practice, and industrial engineering specialization.

### Course Structure

| Sem | Code                                        | Course Name                                          | SCU | Total |
|-----|---------------------------------------------|------------------------------------------------------|-----|-------|
| 1   | CHAR6013011                                 | Character Building: Pancasila                        | 2   | 20    |
|     | SCIE6004011                                 | Physics I                                            | 4   |       |
|     | SCIE6051011                                 | Chemistry                                            | 3   |       |
|     | MATH6014011                                 | Calculus I                                           | 4   |       |
|     | ENGR6093011                                 | Technical Drawing**                                  | 2/1 |       |
|     | SCIE6088011                                 | Biology                                              | 2   |       |
|     | ISYE6245011                                 | Industrial Economy and Accounting                    | 2   |       |
|     | <b>Foreign Language Courses</b>             |                                                      | 0   |       |
| 2   | CHAR6014011                                 | Character Building: Kewarganegaraan                  | 2   | 20    |
|     | LANG6027011                                 | Indonesian                                           | 2   |       |
|     | SCIE6061011                                 | Physics II                                           | 4/1 |       |
|     | MATH6016011                                 | Calculus II                                          | 4   |       |
|     | STAT6003011                                 | Probability Theory                                   | 2   |       |
|     | ISYE6181011                                 | System Engineering & Analysis**                      | 2   |       |
|     | ISYE6157011                                 | Human-Integrated Systems (AOL)                       | 2/1 |       |
|     | <b>Foreign Language Courses</b>             |                                                      | 0   |       |
| 3   | CHAR6015011                                 | Character Building: Agama                            | 2   | 20    |
|     | MATH6004011                                 | Linear and Discrete Mathematics                      | 4   |       |
|     | MATH6019011                                 | Calculus III                                         | 4   |       |
|     | STAT6172011                                 | Applied Statistics                                   | 2   |       |
|     | ISYE6158011                                 | Engineering Data Analysis                            | 3   |       |
|     | ISYE6123011                                 | Deterministic Optimization*&** (AOL)                 | 3   |       |
|     | ENTR6509001                                 | Entrepreneurship: Ideation                           | 2   |       |
|     | <b>Foreign Language Courses</b>             |                                                      | 0   |       |
| 4   | ISYE6207011                                 | Stochastic Processes (AOL & AIE)                     | 2   | 20    |
|     | ENTR6510001                                 | Entrepreneurship: Prototyping                        | 2   |       |
|     | ISYE6041011                                 | Engineering Economy** (AOL)                          | 2   |       |
|     | ISYE6186011                                 | Production & Operation Analysis** (AOL & AIE)        | 3/1 |       |
|     | ISYE6113011                                 | Leadership & Organizational Behavior*&** (AOL)       | 2   |       |
|     | ISYE6300011                                 | Facility Planning and Safety Engineering (AOL & AIE) | 4   |       |
|     | ISYE6182011                                 | Supply Chain: Logistics*                             | 2   |       |
|     | ISYE6248011                                 | Industry 4.0 and Implementation                      | 2   |       |
|     | <b>Foreign Language Courses</b>             |                                                      | 0   |       |
| 5   | ENTR6511001                                 | Entrepreneurship: Market Validation                  | 2   | 20    |
|     | ISYE6163011                                 | Research Methodology                                 | 2   |       |
|     | ISYE6125011                                 | Quality Engineering** (AOL & AIE)                    | 3   |       |
|     | ISYE6185011                                 | Systems Simulation** (AOL)                           | 3   |       |
|     | <b>Stream : Supply Chain Engineering</b>    |                                                      |     |       |
|     | ISYE6164011                                 | E-Supply Chain Management                            | 2/1 |       |
|     | ISYE6183011                                 | Warehouse Management Systems                         | 2   |       |
|     | ISYE6301011                                 | Data Science: Machine Learning                       | 3   |       |
|     | <b>Stream : Service Systems Engineering</b> |                                                      |     |       |
|     | ISYE6166011                                 | Dynamic Service Facility Design                      | 2/1 |       |

| Sem                  | Code                                                             | Course Name                          | SCU | Total |
|----------------------|------------------------------------------------------------------|--------------------------------------|-----|-------|
|                      | ISYE6066011                                                      | Human Interaction in Service Systems | 2   |       |
|                      | ISYE6302011                                                      | E-Service and Usability Engineering  | 3   |       |
|                      | Stream : Manufacturing Systems                                   |                                      |     |       |
|                      | ISYE6184011                                                      | Manufacturing Processes              | 2/1 |       |
|                      | ENGR6005011                                                      | Mechanics of Materials               | 2   |       |
|                      | ISYE6303011                                                      | Smart Manufacturing                  | 3   |       |
|                      | Elective Supply Chain Engineering Courses***                     |                                      |     |       |
|                      | ISYE6067011                                                      | Global Supply Chain*                 | 2   |       |
|                      | ISYE6165011                                                      | Supply Chain Risk & Negotiation      | 2   |       |
|                      | ISYE6115011                                                      | Transportation Modeling              | 2   |       |
|                      | Elective Service Systems Engineering Courses***                  |                                      |     |       |
|                      | MKTG6128011                                                      | Market Research                      | 2   |       |
|                      | ISYE6167011                                                      | Decision Support System              | 2   |       |
|                      | ISYE6168011                                                      | Financial Engineering*               | 2   |       |
|                      | Elective Manufacturing Systems Courses***                        |                                      |     |       |
|                      | ISYE6130011                                                      | Project Management                   | 2   |       |
|                      | ISYE6169011                                                      | Maintenance Management Systems       | 2   |       |
|                      | ISYE6170011                                                      | Sustainable Engineering Systems*     | 2   |       |
|                      | Streaming: Industrial Digital Transformation <sup>1)</sup>       |                                      |     |       |
|                      | ISYE6305054                                                      | Digital Transformation Strategies    | 3   |       |
|                      | ISYE6306054                                                      | Digitalization Product Development   | 2   |       |
|                      | Elective Industrial Digital Transformation Courses <sup>2)</sup> |                                      |     |       |
|                      | Elective Group-1                                                 |                                      |     |       |
|                      | ISYE6307054                                                      | Digital Logistics Management*&***    | 2/1 |       |
|                      | ISYE6267054                                                      | Warehouse & Inventory Systems        | 2   |       |
|                      | ISYE6308054                                                      | Procurement Principles               | 2   |       |
|                      | ISYE6269054                                                      | Sustainable Supply Chain Engineering | 2   |       |
|                      | ISYE6268054                                                      | Data Science: Machine Learning       | 2   |       |
|                      | ISYE6257054                                                      | Industrial 4.0 & Implementation      | 2   |       |
|                      | Elective Group-2                                                 |                                      |     |       |
| ISYE6271054          | Sustainable Service Engineering                                  | 2                                    |     |       |
| ISYE6272054          | Service Innovation & Globalization                               | 2                                    |     |       |
| ISYE6309054          | E-Services & Usability Engineering                               | 2/1                                  |     |       |
| ISYE6310054          | E-Customer Relationship Management                               | 2                                    |     |       |
| ISYE6311054          | Project Management                                               | 2                                    |     |       |
| ISYE6312054          | Lean Enterprise System                                           | 2                                    |     |       |
| Minor Program        |                                                                  | 10                                   |     |       |
| Free Electives       |                                                                  | 10                                   |     |       |
| 6                    | Enrichment Program I                                             |                                      | 20  | 20    |
| 7                    | Enrichment Program II                                            |                                      | 20  | 20    |
| 8                    | ISYE6205011                                                      | Pre – Thesis                         | 2   | 6     |
|                      | ISYE6206011                                                      | Thesis                               | 4   |       |
|                      | ISYE6171011                                                      | Thesis                               | 6   |       |
| TOTAL CREDIT 146 SCU |                                                                  |                                      |     |       |

<sup>\*)</sup> This course is delivered in English

<sup>\*\*)</sup> Global Learning System Course

<sup>\*\*\*)</sup> Students will choose 1 course (2 credits) of elective track course based on preferred track. The elective courses are available for students who choose streaming program in Binus Greater Jakarta

1) Conducted for student mobility program in BINUS @Semarang

2) Students choose a total of 5 credits from either elective group 1 or elective group 2.

Students are required to choose one of the Streaming or Minor Program or Free Electives.

For Free Electives, students are required to choose from the list of Free Electives in Appendix.

-) **AOL** - Assurance of Learning Process System

-) **AIE** - Artificial Intelligence Embedded Course

#### Streaming/Minor/Free Electives:

-) For 5<sup>th</sup> Semester: Students are required to choose Streaming or Minor or Free Electives. For Free Electives, students are required to choose from the list of Free Electives in 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.

#### Appendix Foreign Language Courses

| Foreign Language Courses |                               | SCU |
|--------------------------|-------------------------------|-----|
| ENGL6253011              | English for Frontrunners      | 0   |
| ENGL6254011              | English for Independent Users | 0   |
| ENGL6255011              | English for Professionals     | 0   |
| JAPN6190011              | Basic Japanese Language*      | 0   |
| CHIN6163011              | Basic Chinese Language*       | 0   |

<sup>\*)</sup> 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 60 and 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

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

#### Minor Scheme

| Minor Program                      | Semester 5 |
|------------------------------------|------------|
| <b>Minor @ Binus Kemanggis</b>     |            |
| Blockchain Technology and Business | -          |
| Creative Digital Storytelling      | v          |
| Cross Cultural Communication       | v          |
| Data Analytics                     | v          |
| Digital Banking                    | -          |
| Digital Ecosystem                  | v          |
| English for Business Professionals | v          |
| Event Business and Entertainment   | v          |

| Minor Program                                      | Semester 5 |
|----------------------------------------------------|------------|
| Human Capital in Digital Workplace                 | -          |
| Interactive & Users Experience Design              | v          |
| Sustainable Development                            | v          |
| <b>Minor @ Binus Alam Sutera</b>                   |            |
| Digital Transformation                             | v          |
| <b>Minor @ Binus Bekasi</b>                        |            |
| Culinary                                           | v          |
| Korean Culture and Creativity                      | v          |
| <b>Minor @ Binus Malang</b>                        |            |
| Chinese for Career Pathways                        | v          |
| English for Business Professionals                 | v          |
| Digital Technopreneur                              | -          |
| <b>Minor @ Binus Bandung</b>                       |            |
| DesignPreneur                                      | -          |
| Robotic Process Automation                         | v          |
| <b>Minor @ Binus Semarang</b>                      |            |
| Content Creation                                   | v          |
| Immersive Journey to Japanese Language and Culture | v          |
| Metaverse in Business                              | v          |
| <b>Minor @ Binus Medan</b>                         |            |
| Global Business                                    | -          |

The minor programs can change anytime based on the trends of knowledge and industry each year. Students will receive information about the updated minor programs during the registration period.

## 1. Minor Program: Creative Digital Storytelling

### Introduction

Digital storytelling, by definition, is the process of telling a story using video, images, audio, music, geospatial applications, and any other digital media. Thus, this minor introduces the concept and skills in producing and communicating videos, images, and texts through Elis. It is interdisciplinary in its nature and relies heavily on critical and analytical thinking. It also aims to familiarize students with the technology/ tools needed to adapt a literary work to another form or vice versa. It is the minor that blend perspectives of arts with humanities to facilitate new interpretation of literary works.

### Career Options

Social Media Content Creator; Digital Storyteller; Brand Designer; Digital Storytelling News Editor; Social Media Specialist; Digital Associate; Video Editor; Content Creator; Content Creator; Scriptwriter; Fiction writers; Non-Fiction Writers; Copywriter; Social Media Specialist.

### Course Distribution

#### Fundamental Courses

| Course                                            | SCU       |
|---------------------------------------------------|-----------|
| ENGL6274024 Approaches in Multimodal Storytelling | 2         |
| DSIN6033007 Visual Storytelling                   | 2         |
| ENGL6275024 Storytelling for Business             | 2         |
| FILM6118009 Script Development & Pitching         | 4         |
| <b>Total SCU</b>                                  | <b>10</b> |

### Additional Information

None

## 2. Minor Program: Cross Cultural Communication

### Introduction

This minor program equips students with the ability to communicate using languages and understanding cultures of foreign parties. In addition, this minor program enables students to apply intercultural awareness through both Indonesian and foreign languages and cultures.

### Career Options

Language specialist, language localization specialist, translator, interpreter, mobility consultant/staff.

### Course Distribution

#### Fundamental Courses

| Course      |                                          | SCU |
|-------------|------------------------------------------|-----|
| CHIN6132026 | Chinese Conversation in Daily Activities | 4   |
| COMM6502019 | Communication in Diversity               | 2   |
| BUSS6170025 | Asian Business Ethics                    | 4   |
| Total SCU   |                                          | 10  |

### Additional Information

None

## 3. Minor Program: Data Analytics

### Introduction

The Data Analytics minor program provides insight into acquisitions and analysis of data in organizations by using critical thinking from multiple strategic perspectives, including consumer behavior communicated in the form of visualizations/models that can support retrieval decision.

### Career Options

Data Analyst, Marketing Analyst.

### Course Distribution

#### Fundamental Courses

| Course      |                                         | SCU |
|-------------|-----------------------------------------|-----|
| ISYS6680003 | Introduction to Data Analytics          | 2   |
| ISYS6681003 | Data Management & Descriptive Analytics | 4   |
| STAT6198049 | Statistical for Decision Making         | 4   |
| Total SCU   |                                         | 10  |

### Additional Information

None

## 4. Minor Program: Digital Ecosystem

### Introduction

To face challenges in the era of technological disruption and the wave of the 4.0 industrial revolutions, this minor program offers foundational knowledge about the digital ecosystem in the 4.0 industrial revolutions. Through this minor program, students will be able to develop fundamental knowledge about main pillars of the digital ecosystem, such as informatics, business, and creative design. Students will also be able to combine the knowledge they gain from their respective majors with information technology to develop real solutions for society.

### Career Options

Chief technology officer, digital business strategy expert/consultant, digital solution architect, digital business strategy manager, digital operations manager.

### Course Distribution

#### Fundamental Courses

| Course                                              | SCU       |
|-----------------------------------------------------|-----------|
| COMP6683001 Introduction to Artificial Intelligence | 2/2       |
| ISYS6549003 Digital Innovation                      | 4         |
| COMP6937001 Current Trends in Technology            | 2         |
| <b>Total SCU</b>                                    | <b>10</b> |

### Additional Information

None

## 5. Minor Program: English for Business Professionals

### Introduction

This minor focuses on students who are interested in English in the business context. Students will learn about leadership and management, as well as language innovations in marketing and advertising. There will also be discussions on business communication issues.

### Career Options

Manager, Business practitioner, Entrepreneur, Professional employee.

### Course Distribution

#### Fundamental Courses

| Course                                                        | SCU       |
|---------------------------------------------------------------|-----------|
| ENGL6154024 English for Business Communications               | 4         |
| MKTG6112024 Language Innovations in Marketing and Advertising | 2         |
| ENGL6244024 Social Media Broadcasting                         | 4         |
| <b>Total SCU</b>                                              | <b>10</b> |

### Additional Information

None

## 6. Minor Program: Event Business and Entertainment

### Introduction

This minor program provides practical and managerial skills, as well as knowledge of business in MICE (Meeting, Incentive, Convention, Exhibition) event, sport event, and festival, enabling students to plan and conduct a successful event.

### Career Options

Professional event organizer, Professional Conference Organizer, Event Coordinator, Convention Services Supervisor, Venue Supervisor, Entertainment Supervisor, Event Promotor, Events Planner, Sporting Event Organizer, Catering Coordinator.

## Course Distribution

### Fundamental Courses

| Course      |                                                              | SCU |
|-------------|--------------------------------------------------------------|-----|
| HTMN6151021 | Event Marketing Management                                   | 2   |
| HTMN6152021 | Catering Management                                          | 4   |
| TRSM6232022 | MICE (Meeting, Incentive, Convention, Exhibition) Management | 4   |
| Total SCU   |                                                              | 10  |

### Additional Information

None

## 7. Minor Program: Interactive & Users Experience Design

### Introduction

In today's digital era, people are competing to produce the best digital products that suit the users' needs. How can we make this happen? Minor Interactive & User Experience (UX) Design is the answer. In this Minor program, students will learn about the basics of UX starting from finding, designing, and building a digital product that is in accordance with a good UX concept to ensure that the digital products produced have adopted the UX theory. In this minor program, students will study UX from 3 (three) main pillars of UX, namely Information Systems, Psychology, and Design through 6 (six) subjects that can be selected.

### Career Options

UX Researcher, UX Designer, Usability Analyst, Information Architect, Interaction Designer, Visual Designer, Content Strategies

### Course Distribution

#### Fundamental Courses

| Course      |                                       | SCU |
|-------------|---------------------------------------|-----|
| ISYS6553003 | User-Centered Research and Evaluation | 4   |
| PSYC6176027 | Psychology and User Experience        | 4   |
| DSIN6003007 | Fundamental of Interface Design       | 2   |
| Total SCU   |                                       | 10  |

### Additional Information

None

## 8. Minor Program: Sustainable Development

### Introduction

The minor program on the topic of Sustainable Development prepares students from other disciplines for careers in engineering-related fields. Students will receive enrichment in the fields of Architecture, Industrial Engineering, Civil Engineering, Computer Engineering, and Food Technology. Students also gain knowledge of the development and application of the latest technology in the engineering field, which supports sustainable development and the industrial revolution 4.0.

### Career Options

Construction Manager; Property Manager; Building Manager; Civil Engineer; Project Manager; Pre Sales and Marketing Engineer, Product Specialist, Product Development, Business Development.

## Course Distribution

### Fundamental Courses

| Course      |                                         | SCU |
|-------------|-----------------------------------------|-----|
| ISYE6154011 | Sustainable Design and Manufacture      | 4   |
| CPEN6217010 | Digital for Sustainable Development     | 4   |
| ARCH6119014 | Introduction to Sustainable Development | 2   |
| Total SCU   |                                         | 10  |

### Additional Information

None

## 9. Minor Program: Digital Transformation

### Introduction

Digital Transformation provides knowledge on how information technology can be a competitive advantage in business processes. In this minor program, students will learn about innovation in business processes, data management, and strategies that can support companies to become leaders in the digital era.

### Career Options

Business Analyst, System Analyst, Corporate Information Systems Designer, Database Administrator, Database Designer, Technopreneur, IS Project Manager, IT/IS Consultant and Auditor, Social Media professional, and Marketing Analyst.

### Course Distribution

#### Fundamental Courses

| Course      |                                           | SCU |
|-------------|-------------------------------------------|-----|
| ISYS6559003 | Business Models and Technology Innovation | 4   |
| ISYS6557003 | Business Data Management                  | 4   |
| MGMT6484005 | Digital Strategy                          | 2   |
| Total SCU   |                                           | 10  |

### Additional Information

None

## 10. Minor Program: Culinary

### Introduction

The Culinary Minor Program provides learning that focuses on Culinary, Pastry & Bakery field. The curriculum design is more of practicums, which aim to make students have the competencies required in the fields of Food Production, Pastry & Bakery and Authentic Indonesian Cuisine.

### Career Options

Entrepreneur in the field of Culinary (Resto, Café, Catering Business), Chef, Restaurant Owner/Manager.

### Course Distribution

#### Fundamental Courses

| Course      |                              | SCU |
|-------------|------------------------------|-----|
| HTMN6108021 | Food and Beverage Management | 2   |
| HTMN6008021 | Kitchen Operation            | 4   |
| HTMN6128021 | Pastry and Bakery Operation  | 4   |
| Total SCU   |                              | 10  |

SCU for HTMN6008021, HTMN6128021 are practical

### Additional Information

None

## 11. Minor Program: Korean Culture and Creativity

### Introduction

This minor program provides knowledge and experience in Korean Performance and Culture. The courses will cover pop art, culture, cuisine, film, drama, music, and language. Students who have international experience, especially in Korea, will have a wide range of employment opportunities.

### Career Options

Content Creator, Performer, Creative Marketer, Event Organizer, Foodpreneur, and Advertiser working in a Korean environment.

### Course Distribution

#### Fundamental Courses

| Course      |                                  | SCU |
|-------------|----------------------------------|-----|
| HTMN6163021 | Korean Cuisine and Culinary Arts | 4   |
| COMM6718019 | Korean Language and Media        | 4   |
| FILM6134009 | Hallyu Creative Content          | 2   |
| Total SCU   |                                  | 10  |

### Additional Information

None

## 12. Minor Program: Chinese for Career Pathways

### Introduction

This minor program offers a variety of courses customized to industry needs for Binus non-Chinese Literature students. With this minor program, students who do not major in Mandarin can still experience the benefits of mastering basic Mandarin, which is currently required by industries such as Hospitality, Chinese Companies, Management Banking, and Communication skills.

### Career Options

Business Administration, Translation and Interpretation, International Relations and Diplomacy, Tourism and Hospitality, Marketing and Communications.

### Course Distribution

#### Fundamental Courses

| Course      |                                  | SCU |
|-------------|----------------------------------|-----|
| CHIN6196026 | Mandarin for Future Career       | 4   |
| CHIN6197026 | Easy Way to HSK 2 Preparation    | 4   |
| CHIN6198026 | Exploring Modern Chinese Culture | 2   |
| Total SCU   |                                  | 10  |

### Additional Information

Open a maximum of 2 classes per batch per semester, with each class accommodating up to 30 students.

## 13. Minor Program: Robotic Process Automation

### Introduction

The Robotic Process Automation minor program provides an understanding of the concept of Robotic Process Automation (RPA) in automating repetitive processes, as well as providing an understanding of how the RPA development process involving the concept of Artificial Intelligence.

### Career Options

RPA Developer, RPA Architect, RPA Business Analyst, System Analyst, Corporate Information Systems Designer, Technopreneur, IS Project Manager, IT/IS Consultant.

### Course Distribution

#### Fundamental Courses

| Course      |                                  | SCU |
|-------------|----------------------------------|-----|
| COMP6857001 | Basic Programming for Automation | 2   |
| COMP6858001 | RPA Concept & Design             | 2   |
| ISYS6684003 | RPA Developer Fundamental        | 4   |
| ISYS6687003 | Business Process Improvement     | 2   |
| Total SCU   |                                  | 10  |

### Additional Information

None

## 14. Minor Program: Content Creation

### Introduction

You've probably heard it by now: Content is king. But why? Those days Consumers are going online, marketing has gone digital, and content creation is more important now than ever. Content creation encapsulates copywriting, design, production and other media that provide value and connect you to your target audience. Matching search intent and providing value (to the consumer and brand) is the foundation of successful content creation. Content creators produce work on a variety of platforms including social media, blogs, podcasts, video platforms, case studies, white papers, infographics and more.

### Career Options

Content Creator, Influencer, Social media Specialist.

### Course Distribution

#### Fundamental Courses

| Course      |                             | SCU |
|-------------|-----------------------------|-----|
| FILM6105009 | Filmmaking Fundamental      | 4   |
| MKTG6336055 | Content Marketing Analytics | 4   |
| DSIN6042053 | Photography for Creators    | 2   |
| Total SCU   |                             | 10  |

### Additional Information

None

## 15. Minor Program: Immersive Journey to Japanese Language and Culture

### Introduction

Immersive Journey to Japanese Language and Culture Minor program is focused on the basic learning of the Japanese language (equivalent to N5 or corresponding to CEFR levels A1 to A2). This includes an understanding of Japanese characters (Hiragana, Katakana, basic Kanji) and grammar. Additionally, it encompasses the comprehension of reading and listening skills in Japanese, covering vocabulary, phrases, and simple sentences. This program also includes the development of basic writing and speaking skills in Japanese.

Upon completion of this minor, students will be prepared to read Japanese written in Hiragana, Katakana, and basic Kanji, as well as understand everyday conversations in the Japanese language. Subsequently, students will be equipped to engage in basic-level Japanese speaking and writing.

The outcomes of this minor, built upon a foundation of basic Japanese language proficiency, will benefit students who plan to study abroad in Japan, travel to Japan, or pursue interests and hobbies related to Japan.

### Career Options

Working in Japan, either in Indonesia or Japan, in the following fields as Consultant, Front Office, Tour Guide, Secretary, Finance, HR, Industry Creative (Content creator, dubber, cosplayer).

### Course Distribution

#### Fundamental Courses

| Course      |                                                                                    | SCU |
|-------------|------------------------------------------------------------------------------------|-----|
| JAPN6221025 | Essential Japanese Grammar ( <i>Yoku Tsukaeru Bunpou</i> )                         | 4   |
| JAPN6222025 | Survival Japanese in Various Situations ( <i>Nihon E Ikou, Yasashii Kaiwa De</i> ) | 4   |
| JAPN6223025 | Ideas and Images of Japan ( <i>Nihon Jijou</i> )                                   | 2   |
| Total SCU   |                                                                                    | 10  |

### Additional Information

None

## 16. Minor Program: Metaverse in Business

### Introduction

The objective of the Metaverse in Business minor program in general is to offer a new learning experience in business innovation in the digital world. After completing the Metaverse in Business minor program, students will be able to design Virtual Reality applications so that they are able to present users in a virtual world, as if they are in another place, and develop Augmented Reality applications to present virtual effects in the real world.

### Career Options

AR/VR Designer, AR/VR Developer, AR/VR Engineer, AR/VR Researcher.

### Course Distribution

#### Fundamental Courses

| Course      |                   | SCU |
|-------------|-------------------|-----|
| ISYS6777052 | Business Model    | 2   |
| COMP6889051 | Virtual Reality   | 4   |
| COMP6890051 | Augmented reality | 4   |
| Total SCU   |                   | 10  |

### Additional Information

None

**Appendix: Free Electives (5<sup>th</sup> Semester)**

| No | Course Owner Department           | Course Code | Course Name                                   | SCU | Semester |
|----|-----------------------------------|-------------|-----------------------------------------------|-----|----------|
| 1  | Business Management               | MGMT6400005 | Supply Chain Strategy                         | 2   | 5        |
| 2  | Business Management               | MGMT6459005 | Retail Management                             | 4   | 5        |
| 3  | Business Management               | MGMT6460005 | Retail Supply Chain Management                | 2   | 5        |
| 4  | Global Business Marketing         | MKTG6321005 | Marketing Data Analytics                      | 4   | 5        |
| 5  | Global Business Marketing         | MKTG6322005 | Sales and Customer Relationship Management    | 4   | 5        |
| 6  | International Business Management | MGMT6357005 | Multinational Corporation Management          | 4   | 5        |
| 7  | Industrial Engineering            | ISYE6067011 | Global Supply Chain                           | 2   | 5        |
| 8  | Industrial Engineering            | ISYE6165011 | Supply Chain Risk & Negotiation               | 2   | 5        |
| 9  | Industrial Engineering            | ISYE6115011 | Transportation Modeling                       | 2   | 5        |
| 10 | Industrial Engineering            | ISYE6168011 | Financial Engineering                         | 2   | 5        |
| 11 | Industrial Engineering            | ISYE6130011 | Project Management                            | 2   | 5        |
| 12 | Industrial Engineering            | ISYE6169011 | Maintenance Management Systems                | 2   | 5        |
| 13 | Food Technology                   | FOOD6074015 | Food Processing Technology II                 | 2   | 5        |
| 14 | Food Technology                   | CPEN6235015 | IoT in Food Industry                          | 2   | 5        |
| 15 | Computer Science                  | COMP6800001 | Human and Computer Interaction                | 2/1 | 5        |
| 16 | Computer Science                  | COMP6586001 | Embedded Systems                              | 2   | 5        |
| 17 | Computer Science                  | COMP6144001 | Web Programming                               | 2/1 | 5        |
| 18 | Computer Science                  | COMP6590001 | Geographical Information System               | 2/2 | 5        |
| 19 | Computer Science                  | ISYS6197001 | Business Application Development              | 2/2 | 5        |
| 20 | Tourism                           | TRSM6142022 | Event Management                              | 4   | 5        |
| 21 | Tourism                           | TRSM6218022 | Adventure Tourism Management                  | 4   | 5        |
| 22 | Tourism                           | TRSM6221022 | Sport Tourism                                 | 2   | 5        |
| 23 | Tourism                           | BUSS6137022 | Tourism E-Business                            | 4   | 5        |
| 24 | Tourism                           | MGMT6408022 | Strategic Management for Tourism              | 2   | 5        |
| 25 | Hotel Management                  | HTMN6027021 | Service Management                            | 4   | 5        |
| 26 | Hotel Management                  | HTMN6146021 | Food Safety Management                        | 2   | 5        |
| 27 | Hotel Management                  | HTMN6147021 | Hospitality Management                        | 4   | 5        |
| 28 | Hotel Management                  | HTMN6001021 | Introduction to Hospitality                   | 4   | 5        |
| 29 | Hotel Management                  | HTMN6108021 | Food and Beverage Management                  | 2   | 5        |
| 30 | Accounting                        | ACCT6461020 | Accounting Syariah                            | 2   | 5        |
| 31 | Accounting                        | ACCT6462020 | Audit Psychology                              | 2   | 5        |
| 32 | Finance                           | FINC6189020 | Introduction to Financial Market and Fin-Tech | 2   | 5        |
| 33 | Data Science                      | DTSC6006001 | Machine Learning                              | 2/1 | 5        |
| 34 | Mobile Application & Technology   | MOBI6068001 | Web Design                                    | 2   | 5        |
| 35 | Mobile Application & Technology   | MOBI6070001 | Embedded System and Internet of Things        | 3   | 5        |
| 36 | Mobile Application & Technology   | MOBI6059001 | Mobile Programming                            | 2   | 5        |
| 37 | Statistics                        | STAT6157049 | Data Mining and Visualization                 | 2   | 5        |
| 38 | Information Systems               | ISYS6196003 | Business Analytics                            | 2   | 5        |
| 39 | Information Systems               | ISYS6289003 | Collaborative Computing                       | 4   | 5        |
| 40 | Information Systems               | ISYS6402003 | Business Analytics                            | 2/2 | 5        |
| 41 | Business Information Technology   | ISYS6579003 | Knowledge-Based AI: Cognitive Systems         | 4   | 5        |
| 42 | International Relations           | INTR6151029 | Regional Integration in Europe                | 2   | 5        |

| No | Course Owner Department | Course Code | Course Name                                                | SCU | Semester |
|----|-------------------------|-------------|------------------------------------------------------------|-----|----------|
| 43 | International Relations | INTR6152029 | Regional Integration in America                            | 2   | 5        |
| 44 | International Relations | INTR6153029 | Regional Integration in East Asia                          | 2   | 5        |
| 45 | International Relations | INTR6154029 | Regional Integration in Africa and Middle East             | 2   | 5        |
| 46 | Chinese Literature      | CHIN6157026 | Chinese Business for Etiquette (Beginner)                  | 4   | 5        |
| 47 | Chinese Literature      | CHIN6158026 | Chinese Business in Daily Communication                    | 4   | 5        |
| 48 | Chinese Literature      | CHIN6159026 | Chinese Character Writing                                  | 2   | 5        |
| 49 | Business Law            | LAWS6110028 | Cyber Law                                                  | 2   | 5        |
| 50 | Business Law            | LAWS6159028 | Legal Aspect in Business                                   | 2   | 5        |
| 51 | Business Law            | LAWS6170028 | Investment Law                                             | 2   | 5        |
| 52 | Business Law            | LAWS6174028 | Contract & Legislative Drafting                            | 2   | 5        |
| 53 | Business Law            | LAWS6176028 | Tax Law                                                    | 2   | 5        |
| 54 | Psychology              | PSYC6130027 | Human Performance Technology                               | 4   | 5        |
| 55 | Psychology              | PSYC6191027 | E-Learning Psychology                                      | 4   | 5        |
| 56 | Japanese Literature     | JAPN6151025 | Reflection of Japanese Experience (Nihon Keiken no Han'ei) | 2   | 5        |
| 57 | Japanese Literature     | JAPN6162025 | Japanese Literary Criticism (Nihon Bungaku Hyouron)        | 2   | 5        |
| 58 | Japanese Literature     | JAPN6111025 | Introductory Japanese I                                    | 4   | 5        |
| 59 | Japanese Literature     | JAPN6145025 | Japanese Grammar I (Bunpou I)                              | 4   | 5        |
| 60 | Japanese Literature     | JAPN6148025 | Japanese Letter I (Kanji I)                                | 2   | 5        |
| 61 | Japanese Literature     | JAPN6149025 | Reading Comprehension I (Dokkai I)                         | 2   | 5        |

#### Enrichment Program I (6<sup>th</sup> Semester) & Enrichment Program II (7<sup>th</sup> Semester):

-) Student will take one of enrichment program tracks (off campus). See enrichment appendix for the tracks detail.

#### 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  |    |    |     |

| Track | Semester 6 |    |    |    |    |    |     | Semester 7 |    |    |    |    |    |    |     |
|-------|------------|----|----|----|----|----|-----|------------|----|----|----|----|----|----|-----|
|       | IN         | RS | EN | CD | SA | IS | etc | IN         | RS | EN | CD | SA | IS | FS | etc |
| 18    |            |    |    | v  |    |    |     |            |    |    |    | v  |    |    |     |
| 19    |            |    |    |    | v  |    |     |            |    |    |    | v  |    |    |     |
| 20    |            |    |    |    |    | v  |     |            |    |    |    | v  |    |    |     |
| 21    | v          |    |    |    |    |    |     |            |    |    |    |    | v  |    |     |
| 22    |            | v  |    |    |    |    |     |            |    |    |    |    | v  |    |     |
| 23    |            |    |    | v  |    |    |     |            |    |    |    |    | v  |    |     |
| 24    |            |    |    |    | v  |    |     |            |    |    |    |    | v  |    |     |
| 25    |            |    | v  |    |    |    |     |            |    | v  |    |    |    |    |     |

**Note:**

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

**Description:**

Student will take one of enrichment program tracks

**Company Internship Track**

| Code                  | Course Name                          | SCU | Total |
|-----------------------|--------------------------------------|-----|-------|
| Enrichment Program I  |                                      |     | 20    |
| ISYE6208011           | Industrial Practice I                | 8   |       |
| ISYE6210011           | Engineering Ethics and Competence I  | 8   |       |
| ISYE6212011           | EES in Industrial Engineering I      | 4   |       |
| Enrichment Program II |                                      |     | 20    |
| ISYE6209011           | Industrial Practice II               | 8   |       |
| ISYE6211011           | Engineering Ethics and Competence II | 8   |       |
| ISYE6213011           | EES in Industrial Engineering II     | 4   |       |

**Research Fellowship Track**

| Code                  | Course Name                                     | SCU | Total |
|-----------------------|-------------------------------------------------|-----|-------|
| Enrichment Program I  |                                                 |     | 20    |
| RSCH6701011           | Research Experience I                           | 8   |       |
| RSCH6703011           | Scientific Writing in Industrial Engineering I  | 8   |       |
| RSCH6705011           | Global EES in Industrial Engineering I          | 4   |       |
| Enrichment Program II |                                                 |     | 20    |
| RSCH6702011           | Research Experience II                          | 8   |       |
| RSCH6704011           | Scientific Writing in Industrial Engineering II | 8   |       |
| RSCH6706011           | Global EES in Industrial Engineering II         | 4   |       |

### Entrepreneurship Track

| Code                         | Course Name                            | SCU | Total |
|------------------------------|----------------------------------------|-----|-------|
| <b>Enrichment Program I</b>  |                                        |     | 20    |
| ENPR6214011                  | New Venture Industrial Initiation      | 8   |       |
| ENPR6215011                  | Industrial Product Development Process | 8   |       |
| ENPR6216011                  | EES in New Industrial Business I       | 4   |       |
| <b>Enrichment Program II</b> |                                        |     | 20    |
| ENPR6218011                  | Industrial Product Launching           | 8   |       |
| ENPR6219011                  | Industrial Business Development        | 8   |       |
| ENPR6217011                  | EES in New Industrial Business II      | 4   |       |

### Community Impact Internship Track

| Code                        | Course Name                                                          | SCU | Total |
|-----------------------------|----------------------------------------------------------------------|-----|-------|
| <b>Enrichment Program I</b> |                                                                      |     | 20    |
| CMDV6459011                 | Community Outreach Project Implementation I                          | 8   |       |
| CMDV6461011                 | Design Project I                                                     | 8   |       |
| CMDV6463011                 | Employability and Entrepreneurial Skills in Industrial Engineering I | 4   |       |

### Study Abroad Track

| Code                                    | Course Name                         | SCU | Total |
|-----------------------------------------|-------------------------------------|-----|-------|
| Elective courses list for study abroad* |                                     |     | 20    |
| Enrichment Program I                    |                                     |     |       |
| GLOB6005011                             | Elective Course for Study Abroad 1  | 4   |       |
| GLOB6006011                             | Elective Course for Study Abroad 2  | 4   |       |
| GLOB6007011                             | Elective Course for Study Abroad 3  | 4   |       |
| GLOB6008011                             | Elective Course for Study Abroad 4  | 4   |       |
| GLOB6009011                             | Elective Course for Study Abroad 5  | 2   |       |
| GLOB6010011                             | Elective Course for Study Abroad 6  | 2   |       |
| GLOB6011011                             | Elective Course for Study Abroad 7  | 2   |       |
| GLOB6012011                             | Elective Course for Study Abroad 8  | 2   |       |
| GLOB6013011                             | Elective Course for Study Abroad 9  | 2   |       |
| GLOB6014011                             | Elective Course for Study Abroad 10 | 2   |       |
| GLOB6015011                             | Elective Course for Study Abroad 11 | 2   |       |
| GLOB6016011                             | Elective Course for Study Abroad 12 | 2   |       |
| GLOB6249011                             | Elective Course for Study Abroad 27 | 3   |       |
| GLOB6250011                             | Elective Course for Study Abroad 28 | 3   |       |
| GLOB6251011                             | Elective Course for Study Abroad 29 | 4   |       |
| Enrichment Program II                   |                                     |     | 20    |
| GLOB6017011                             | Elective Course for Study Abroad 13 | 4   |       |
| GLOB6018011                             | Elective Course for Study Abroad 14 | 4   |       |
| GLOB6019011                             | Elective Course for Study Abroad 15 | 4   |       |

| Code        | Course Name                         | SCU | Total |
|-------------|-------------------------------------|-----|-------|
| GLOB6020011 | Elective Course for Study Abroad 16 | 4   |       |
| GLOB6021011 | Elective Course for Study Abroad 17 | 2   |       |
| GLOB6022011 | Elective Course for Study Abroad 18 | 2   |       |
| GLOB6023011 | Elective Course for Study Abroad 19 | 2   |       |
| GLOB6024011 | Elective Course for Study Abroad 20 | 2   |       |
| GLOB6025011 | Elective Course for Study Abroad 21 | 2   |       |
| GLOB6026011 | Elective Course for Study Abroad 22 | 2   |       |
| GLOB6027011 | Elective Course for Study Abroad 23 | 2   |       |
| GLOB6028011 | Elective Course for Study Abroad 24 | 2   |       |
| GLOB6041011 | Elective Course for Study Abroad 25 | 3   |       |
| GLOB6252011 | Elective Course for Study Abroad 30 | 3   |       |
| GLOB6253011 | Elective Course for Study Abroad 31 | 4   |       |

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

#### Specific Independent Study Track

| Code                                                  | Course Name                                       | SCU | Total |
|-------------------------------------------------------|---------------------------------------------------|-----|-------|
| Elective courses list for Specific Independent Study* |                                                   |     | 20    |
| Enrichment Program I/II                               |                                                   |     |       |
| CSIS6001011                                           | Course Certification                              | 3   |       |
| CSIS6002011                                           | Technical Skill Enrichment                        | 4   |       |
| CSIS6003011                                           | Industrial Project                                | 9   |       |
| CSIS6004011                                           | Soft Skill Enrichment                             | 4   |       |
| CSIS6005011                                           | Elective Course for Specific Independent Study 1  | 8   |       |
| CSIS6006011                                           | Elective Course for Specific Independent Study 2  | 8   |       |
| CSIS6007011                                           | Elective Course for Specific Independent Study 3  | 6   |       |
| CSIS6008011                                           | Elective Course for Specific Independent Study 4  | 6   |       |
| CSIS6009011                                           | Elective Course for Specific Independent Study 5  | 6   |       |
| CSIS6010011                                           | Elective Course for Specific Independent Study 6  | 5   |       |
| CSIS6011011                                           | Elective Course for Specific Independent Study 7  | 5   |       |
| CSIS6012011                                           | Elective Course for Specific Independent Study 8  | 5   |       |
| CSIS6013011                                           | Elective Course for Specific Independent Study 9  | 5   |       |
| CSIS6014011                                           | Elective Course for Specific Independent Study 10 | 4   |       |
| CSIS6015011                                           | Elective Course for Specific Independent Study 11 | 4   |       |
| CSIS6016011                                           | Elective Course for Specific Independent Study 12 | 4   |       |
| CSIS6017011                                           | Elective Course for Specific Independent Study 13 | 4   |       |
| CSIS6018011                                           | Elective Course for Specific Independent Study 14 | 4   |       |
| CSIS6019011                                           | Elective Course for Specific Independent Study 15 | 3   |       |
| CSIS6020011                                           | Elective Course for Specific Independent Study 16 | 3   |       |
| CSIS6021011                                           | Elective Course for Specific Independent Study 17 | 3   |       |
| CSIS6022011                                           | Elective Course for Specific Independent Study 18 | 3   |       |
| CSIS6023011                                           | Elective Course for Specific Independent Study 19 | 3   |       |

| Code        | Course Name                                       | SCU | Total |
|-------------|---------------------------------------------------|-----|-------|
| CSIS6024011 | Elective Course for Specific Independent Study 20 | 3   |       |
| CSIS6025011 | Elective Course for Specific Independent Study 21 | 2   |       |
| CSIS6026011 | Elective Course for Specific Independent Study 22 | 2   |       |
| CSIS6027011 | Elective Course for Specific Independent Study 23 | 2   |       |
| CSIS6028011 | Elective Course for Specific Independent Study 24 | 2   |       |
| CSIS6029011 | Elective Course for Specific Independent Study 25 | 2   |       |
| CSIS6030011 | Elective Course for Specific Independent Study 26 | 2   |       |
| CSIS6031011 | Elective Course for Specific Independent Study 27 | 2   |       |
| CSIS6032011 | Elective Course for Specific Independent Study 28 | 2   |       |
| CSIS6033011 | Elective Course for Specific Independent Study 29 | 1   |       |
| CSIS6034011 | Elective Course for Specific Independent Study 30 | 1   |       |
| CSIS6035011 | Elective Course for Specific Independent Study 31 | 1   |       |
| CSIS6036011 | Elective Course for Specific Independent Study 32 | 1   |       |

\*) For students who take BINUS 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 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

Students will receive information about Fast Track Courses during the registration period.

### The Table of Prerequisite for Management Program

| Course      |                                 | SCU | Sem | Course Prerequisite |                            | SCU | Sem |
|-------------|---------------------------------|-----|-----|---------------------|----------------------------|-----|-----|
| MATH6019011 | Calculus III                    | 4   | 3   | MATH6014011         | Calculus I                 | 4   | 1   |
| ISYE6207011 | Stochastic Processes            | 2   | 4   | STAT6003011         | Probability Theory         | 2   | 2   |
| ISYE6186011 | Production & Operation Analysis | 3/1 | 4   | ISYE6123011         | Deterministic Optimization | 3   | 3   |
| ISYE6125011 | Quality Engineering             | 3   | 5   | STAT6172011         | Applied Statistics         | 2   | 3   |

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

| No. | Course Code | Course Name                              | Minimal Grade |
|-----|-------------|------------------------------------------|---------------|
| 1.  | CHAR6013011 | Character Building: Pancasila            | B             |
| 2.  | ISYE6157011 | Human-Integrated Systems                 | C             |
| 3.  | ISYE6123011 | Deterministic Optimization*              | C             |
| 4.  | ISYE6186011 | Production & Operation Analysis*         | C             |
| 5.  | ISYE6300011 | Facility Planning and Safety Engineering | C             |
| 6.  | ISYE6041011 | Engineering Economy                      | C             |
| 7.  | ISYE6125011 | Quality Engineering*                     | C             |
| 8.  | ENTR6511001 | Entrepreneurship: Market Validation      | C             |

\*) Tutorial