# Computer Science

## Introduction

In the new millennium and the global era, the role of information and automation in the various domains and activities of the business industry is becoming more important. The success of the activities is determined by how computer science can support managing the information. The information must be up-to-date, accurate and comprehensive to allow decision-makers to determine the enterprise's strategy. Furthermore, automation can facilitate human activity, accelerate the pace of work and make it more effective and efficient, while also increasing productivity in various activities. The development of communication and computer technology has made it possible to get information that is rapid, exact, and accurate. It also increases the application of automation in various fields such as industry, business, office affairs and the development of science and technology.

The Computer Science Program was founded in September 1987, under STMIK Bina Nusantara; it became one of the programs under the coordination of the Faculty of Computer Science, Bina Nusantara University in December 1998.

Computer Science Program at Bina Nusantara University emphasizes the processes, techniques, and tools that go into developing computer-based systems, with specialities in intelligent systems, software engineering, multimedia technology, database systems and network technology.

## Vision

A world class study program by providing excellent educational experiences in Computer Science, which focuses on developing creative technology solutions, fostering and empowering the society in building and serving the nation.

## Mission

The mission of Computer Science Department is to contribute to the global community through the provision of world-class education by:

1. Educating students to effectively apply their educational experiences in developing creative solutions in computer science, to solve real-world problems.
2. Preparing graduates to develop exemplary soft skills & technical skills required as computer science professionals, leaders, and entrepreneurs in global market.
3. Promoting high impact computer science research that contributes to the nation.
4. Fostering BINUSIAN as computer science lifelong learners through self-enrichment.
5. Empowering BINUSIAN to continuously improve society's quality of life through knowledge in computer science.

## Program Objective

The objectives of the program are:

1. Graduates will become successful professionals in ICT fields;
2. Graduates will obtain employment in global companies or become entrepreneurs;
3. Graduates will obtain professional certification or continue their study to the postgraduate.

## 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 computer science;
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 computer science;
6. Able to apply computer science theory and software development fundamentals to produce computing-based solutions.

## Prospective Career of the Graduates

After finishing the program, the graduate of the Computer Science Program could follow a career as:

1. Software Engineer/Developer
2. System Analyst/Developer
3. Web Engineer/Developer
4. Computer Network Specialist
5. Database Specialist
6. Artificial Intelligence Specialist
7. Data Scientist
8. IT Support/Consultant
9. Researcher
10. Multimedia Programmer
11. Lecturer/Trainer

## Curriculum

The curriculum of the Computer Science Program has been developed in line with the National Curriculum. Also, the local content has been developed in line with the Computer Science Curriculum standard of ACM (Association for Computing Machinery), several local and foreign universities, and market trends, so that the graduates of the Computer Science Program are expected to be able to face competition at both a national and international level. Generally, the subjects of the curriculum 2020 are divided into the following groups of subjects:

**Mathematics Group (Science)**

The objective of this group is to provide an understanding of mathematics as one of the principal foundations of computer science. Another objective is to give an understanding of scientific methodology (data collection, hypothesis, research, analysis) in problem-solving.

**Character Building Group (Professional Practices)**

The objective of this group is to develop the personal strengths of the student and to provide him or her with a professional character, professionalism in their field, management skills, oral and written communication skills, understanding of business ethic, ability to work as a team, and to develop a "Binusian" Character.

**Core Group**

The objective of this group is to provide a grounding in Computer Science through practice as well as applied theory which is required by business both now and in the future. The subjects that are included in this group are programming, algorithm design and analysis, software engineering, database systems, computer graphics, multimedia technology, human and computer interaction, operation systems, computer architecture, and computer networks.

**Concentration Subject (Stream)**

The objective of this group is to allow students to obtain a deep understanding of a range of disciplines in computer science. The students are expected to develop their skills and master the techniques which will allow them to research both their thesis and/or to continue their studies.

The Concentration subjects (Stream) provide:

- Software Engineering: to explore the various methodologies and software engineering equipment.
- Intelligent Systems: to explore the various techniques of computer intelligence that can be applied to solving the problem.
- Database Technology: to explore the various technologies and database applications.
- Network Technology: to explore computer networking which consists of installation, administration, and computer networking management.
- Interactive Multimedia: to explore computer interactive multimedia applications, based on computer programming, design tools, and software engine.
- Internet of Things: to explore the various techniques and implementation of IoT.
- Digital Creative Technology: focuses on competencies development in the smart software application development field based on big data analytics to support business innovation through digital transformation in Industry 4.0 era (Digital Business Innovation and Transformation).

**Entrepreneur and Employability Skill (Internship)**

The objective of this group of subjects is to prepare students with professional experience, and work ethics and to experience the working environment. The students are expected to apply and practice their knowledge in the real working area such as industry, research lab, and also an entrepreneur startup. They are also expected to give reports on the result of the subjects.

**Course Structure**

| Sem | Code | Course Name | SCU | Total |
|---|---|---|---|---|
| 1 | CHAR6013001 | Character Building: Pancasila | 2 | 20 |
| | MATH6025001 | Discrete Mathematics | 4 | |
| | MATH6030001 | Linear Algebra | 2 | |
| | COMP6047001 | Algorithm and Programming** **(AOL)** | 4/2 | |
| | COMP6798001 | Program Design Methods* **(AOL)** | 2 | |
| | LANG6027001 | Indonesian | 2 | |
| | STAT6171001 | Basic Statistics | 2 | |
| | **Foreign Language Courses** | | 0 | |
| 2 | CHAR6014001 | Character Building: Kewarganegaraan | 2 | 20 |
| | COMP6048001 | Data Structures*&** **(AOL)** | 4/2 | |
| | MATH6031001 | Calculus | 4 | |
| | ENTR6509001 | Entrepreneurship: Ideation | 2 | |

| Sem | Code | Course Name | SCU | Total |
|---|---|---|---|---|
| | COMP6800001 | Human and Computer Interaction** **(AOL)** | 2/1 | |
| | MATH6183001 | Scientific Computing **(AOL)** | 2/1 | |
| | **Foreign Language Courses** | | 0 | |
| 3 | CHAR6015001 | Character Building: Agama | 2 | 21 |
| | COMP6049001 | Algorithm Design  and Analysis* **(AOL)** | 4 | |
| | CPEN6247001 | Computer Networks **(AOL)** | 2/1 | |
| | COMP6065001 | Artificial Intelligence** **(AOL)** | 4 | |
| | SCIE6063001 | Computational Physics **(AOL)** | 2/1 | |
| | COMP6799001 | Database Technology** **(AOL)** | 2/1 | |
| | COMP6820001 | Object Oriented Programming*&** | 2 | |
| | **Foreign Language Courses** | | 0 | |
| 4 | COMP6696001 | Research Methodology in Computer Science* **(AOL)** | 2 | Streaming: 21 Minor / FE/ MST: 17 |
| | COMP6100001 | Software Engineering** **(AOL)** | 4 | |
| | SCIE6062001 | Computational Biology | 2/1 | |
| | **Streaming : Software Engineering** | | | |
| | COMP6106001 | Code Reengineering | 4 | |
| | COMP6114001 | Pattern Software Design | 2/2 | |
| | COMP6884001 | Agile Software Development*&** | 4 | |
| | **Streaming : Intelligent System** | | | |
| | COMP6885001 | Natural Language Processing*&** | 2/2 | |
| | COMP6577001 | Machine Learning | 4 | |
| | COMP6822001 | Speech Recognition | 2/2 | |
| | **Streaming : Interactive Multimedia** | | | |
| | COMP8129001 | User Experience*&** | 2/2 | |
| | COMP6823001 | Multimedia Systems** | 2 | |
| | COMP7094001 | Multimedia Programming Foundation* | 2/2 | |
| | COMP7128001 | Game Design | 2 | |
| | **Streaming : Database Technology** | | | |
| | COMP6481001 | Database Design | 2/1 | |
| | COMP6579001 | Big Data Processing*&** | 2/2 | |
| | COMP6710001 | Distributed Cloud Computing | 2/1 | |
| | COMP6886001 | Data Analytics | 2 | |
| | **Streaming : Network Technology** | | | |
| | COMP6824001 | Computer Security* | 2/2 | |
| | COMP6584001 | Network and System Programming*&** | 2/2 | |
| | COMP6827001 | Linux System Administration and Security | 2/2 | |
| | **Streaming : Internet of Things (IoT)[1]** | | | |
| | COMP6849031 | Embedded System | 2/2 | |
| | COMP6850031 | Multimedia & Mixed Reality | 2/1 | |
| | MOBI6072031 | Mobile programming | 2/1 | |
| | COMP6655031 | Cyber Security in IoT | 2 | |

| Sem | Code | Course Name | SCU | Total |
|-----|------|-------------|-----|-------|
| | **Streaming : Digital Creative Technology[2]** | | | |
| | COMP6679004 | Web Programming** | 4 | |
| | COMP6677004 | Multimedia Systems | 2/2 | |
| | COMP6856004 | Popular Programming Technology** | 2 | |
| | **General Courses for Stream Digital Creative Technology** | | | |
| | COMP6955004 | Database Design | 2 | |
| | **Streaming: Mobile and Game Technology[3]** | | | |
| | COMP6897051 | Game Design & Programming | 2/2 | |
| | COMP6898051 | User Experience | 2 | |
| | COMP6899051 | Machine Learning | 2 | |
| | COMP6900051 | Mobile Embedded Systems | 4 | |
| | **Minor Program** | | 8 | |
| | **Free Elective** | | 8 | |
| | **Multidisciplinary Stream** | | 8 | |
| | **Foreign Language Courses** | | 0 | |
| | COMP6062001 | Compilation Techniques | 4 | |
| | COMP6697001 | Operating System **(AOL)** | 2 | |
| | ENTR6511001 | Entrepreneurship: Market Validation | 2 | |
| | **Elective Courses***** | | | |
| | MOBI6059001 | Mobile Programming | 2 | |
| | COMP6586001 | Embedded Systems | 2 | |
| | COMP6226001 | Competitive Programming* | 2 | |
| | COMP6821001 | Web Programming | 2 | |
| | COSC6065001 | Network Security Fundamental | 2 | |
| 5 | **Streaming : Software Engineering** | | | Streaming: 18<br>Minor / FE: 22 |
| | COMP6122001 | Framework Layer Architecture | 2/2 | |
| | COMP6115001 | Object Oriented Analysis & Design* | 2/2 | |
| | **Streaming : Intelligent System** | | | |
| | COMP7116001 | Computer Vision* | 2/2 | |
| | COMP6826001 | Deep Learning | 2/2 | |
| | **Streaming : Interactive Multimedia** | | | |
| | COMP6583001 | Computer Graphics | 2/2 | |
| | COMP7139001 | Game Programming* | 4 | |
| | **Streaming : Database Technology** | | | |
| | COMP6590001 | Geographical Information System* | 2/2 | |
| | COMP6140001 | Data Mining | 2/2 | |
| | **Streaming : Network Technology** | | | |
| | COMP6825001 | Introduction to Cloud Infrastructure | 2 | |
| | COMP7142001 | Popular Network Technology | 2/2 | |
| | COMP6113001 | Network Design | 2 | |
| | **Streaming : Internet of Things (IoT)[1]** | | | |
| | COMP6757031 | Computer Vision in Internet of Things | 2/2 | |

| Sem | Code | Course Name | SCU | Total |
|---|---|---|---|---|
| | COMP6882031 | IoT Development and Architecture | 2/2 | |
| | **Elective Courses for Stream Internet of Things (IoT)** | | | |
| | COMP6921031 | Web Development | 2 | |
| | COMP6922031 | Cloud Computing | 2 | |
| | **Streaming : Digital Creative Technology**[2] | | | |
| | COMP6678004 | Big Data Analytics for Business | 4 | |
| | MOBI6063004 | Mobile Application Programming** | 4 | |
| | COMP6680004 | Data Visualization* | 2 | |
| | **Streaming: Mobile and Game Technology**[3] | | | |
| | COMP6903051 | Computer Vision | 2/2 | |
| | COMP6905051 | Mobile and Game Development Capstone Project | 4 | |
| | **General Courses for stream Mobile and Game Technology** | | | |
| | COMP6923051 | Hybrid Application Development | 2 | |
| | **Minor Program** | | 12 | |
| | **Free Elective** | | 12 | |
| | **Multidisciplinary Stream** | | 12 | |
| 6 | **Enrichment Program I** | | 20 | 20 |
| 7 | **Enrichment Program II** | | 20 | 20 |
| 8 | COMP6747001 | Pre-Thesis | 2 | 6 |
| | COMP6748001 | Thesis | 4 | |
| | COMP6861001 | Thesis | 6 | |
| | | | **TOTAL CREDITS 146 Credits** | |

*) This course is delivered in English
**) Global Learning System course
***)Students will choose 1 course (2 credits) from the list of elective courses. The elective courses are available for students who choose stream in Binus Greater Jakarta or Minor Program or Free Electives or Multidisciplinary Stream
1) Conducted for student mobility program in BINUS @Bandung
2) Conducted for student mobility program in BINUS @Malang
3) Conducted for student mobility program in BINUS @Semarang

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

**Streaming/Minor/Free Electives/Multidisiplanary Stream:**
-) For 4th Semester: Students are required to choose Streaming/ Minor/ Free Electives/ Multidisiplanary Stream. For Free Electives, students are required to choose from the list of Free Electives in Appendix.
-) For 5th Semester: Students are required to choose Streaming/ Minor/ Free Electives/ Multidisiplanary Stream same with previous semester. For Free Electives, students are required to choose from the list of Free Electives in Appendix.

**Foreign Language Courses:**
Students will take foreign language courses according to BINUS University English proficiency test results. See foreign language courses appendix for the details. Students must pass with a minimum Grade of C.

**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 | | SCU |
|---|---|---|
| ENGL6253001 | English for Frontrunners | 0 |
| ENGL6254001 | English for Independent Users | 0 |
| ENGL6255001 | English for Professionals | 0 |
| JAPN6190001 | Basic Japanese Language* | 0 |
| CHIN6163001 | Basic Chinese Language* | 0 |

*) This course is optional for students

1. *Students with Binus University English Proficiency Test score less than 437 are required to take English for Frontrunners and English for Independent Users.*

2. *Students with Binus University English Proficiency Test score less than 520 are required to take English for Independent Users and English for Professionals.*

3. *Students with Binus University English Proficiency Test score equal to or greater than 520 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.*

## Minor Scheme

| Minor Program | Semester 4 | Semester 5 |
|---|---|---|
| **Minor @ Binus Kemanggisan** | | |
| Digital Ecosystem | - | - |
| Human Capital in Digital Workplace | v | v |
| Sustainable Development | v | v |
| Cross Cultural Communication | v | v |
| Interactive & Users Experience Design | v | v |
| Data Analytics | v | v |
| Robotic Process Automation | v | v |
| Event Business and Entertainment | v | v |
| Creative Digital Storytelling | v | v |
| Digital Banking | v | v |
| Blockchain Technology and Business | v | v |
| **Minor @ Binus Alam Sutera** | | |
| Digital Transformation | v | v |
| **Minor @ Binus Bekasi** | | |
| Virtual Service Experience | - | - |
| Culinary | v | v |
| **Minor @ Binus Malang** | | |
| Digital Technopreneur | v | v |
| **Minor @ Binus Bandung** | | |
| DesignPreneur | v | v |
| **Minor @ Binus Semarang** | | |
| Metaverse in Business | v | v |
| Content Creation | v | v |

## 1. Minor Program: Human Capital in Digital Workplace

**Fundamental Courses**

| Course | | SCU |
|---|---|---|
| PSYC6174027 | Psychology in The Workplace | 4 |
| MGMT6349005 | Digital Workplace Strategy | 4 |
| ISYS6551003 | Digital Workplace and Technology | 4 |
| LAWS6157028 | Legal Aspects in Digital Workplace | 4 |
| PSYC6175027 | Human Resources Development | 4 |
| | **Total SCU** | **20** |

## 2. Minor Program: Sustainable Development

**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** |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ISYE6155011 | Occupational, Health, Safety, and Administration in Engineering | 2 |
| DSGN6835008 | Engineering Material | 4 |
| CIVL6118013 | Engineering Economic | 4 |
| | **Total SCU** | **10** |

## 3. Minor Program: Cross Cultural Communication

**Fundamental Courses**

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

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| CHIN6134026 | Chinese Conversation in Business Communication | 4 |
| LAWS6158028 | Private International Law | 2 |
| INTR6135029 | Comparative Politics | 4 |
| | **Total SCU** | **10** |

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

**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 |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ISYS6554003 | Core Principles: Interactive Design | 4 |
| DSGN6837007 | Digital Design Production | 4 |
| ISYS6556003 | Information Architecture | 2 |
| | Total SCU | 10 |

### 5. Minor Program: Data Analytics

**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 |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ISYS6682003 | Application of Predictive Analytics to Business Data | 4 |
| ISYS6683003 | Prescriptive Analytics and Optimization | 4 |
| MKTG6312005 | Digitalization of Markets and Consumption | 2 |
| | Total SCU | 10 |

### 6. Minor Program: Robotic Process Automation

**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 |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ISYS6685003 | RPA Developer Advance | 4 |
| ISYS6686003 | RPA Business Analytics Fundamental | 4 |
| COMP6859001 | Intelligence Automation | 2 |
| | Total SCU | 10 |

### 7. Minor Program: Event Business and Entertainment

**Fundamental Courses**

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

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| TRSM6233022 | Event Sponsorship and Funding | 2 |
| TRSM6234022 | Sport and Entertainment Event Management | 4 |
| TRSM6235022 | Festival & Cultural Event | 4 |
| | Total SCU | 10 |

### 8. Minor Program: Creative Digital Storytelling

**Fundamental Courses**

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

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| ENGL6276024 | Cultures, Language, and Arts Production | 4 |
| JAPN6212025 | Anime and Manga as Storytelling | 2 |
| ENGL6277024 | Music as Medium for Storytelling | 4 |
| | Total SCU | 10 |

### 9. Minor Program: Digital Banking

**Fundamental Courses**

| | Course | SCU |
|---|---|---|
| ISYS6824003 | Technology Innovation in Banking | 2 |
| FINC6217020 | Bank Risk Management in the Digital Era | 4 |
| FINC6218020 | Digital Finance and The Role of Central Bank | 4 |
| | Total SCU | 10 |

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| MGMT6510005 | Business Process Management in Banking and Finance | 4 |
| ISYS6825003 | Data Analytics in Banking and Finance | 4 |
| MGMT6511005 | Digital Leadership | 2 |
| | Total SCU | 10 |

## 10. Minor Program: Blockchain Technology and Business

**Fundamental Courses**

| | Course | SCU |
|---|---|---|
| ISYS6826003 | Introduction to Blockchain Technology | 4 |
| ISYS6827003 | Blockchain Economy & Business | 4 |
| DTSC6016001 | Basic Blockchain Programming | 2 |
| | **Total SCU** | **10** |

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| ISYS6828003 | Blockchain Architecture Design and Implementation | 4 |
| DTSC6017001 | Advanced Blockchain Programming | 2 |
| DTSC6018001 | Prototyping Blockchain Project | 4 |
| | **Total SCU** | **10** |

## 11. Minor Program: Digital Transformation

**Fundamental Courses**

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

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| ISYS6695003 | Digital Marketing Analysis | 4 |
| STAT6200049 | Practical Statistics for Digital Business | 4 |
| ISYS6560003 | Success Factor for Leading Digital Transformation | 2 |
| | **Total SCU** | **10** |

## 12. Minor Program: Culinary

**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*

**Supporting Courses**

| | Course | SCU |
|---|---|---|
| HTMN6155021 | Indonesian Cuisine | 4 |
| HTMN6125021 | Restaurant Operation | 4 |
| HTMN6154021 | Culinary Tourism | 2 |
| | **Total SCU** | **10** |

*SCU for HTMN6155021, HTMN6125021 are practical*

## 13. Minor Program: Digital Technopreneur

**Fundamental Courses**

| Course | | SCU |
|---|---|---|
| ENTR6528002 | The Entrepreneurial Innovator | 4 |
| DSGN6839006 | Interactive Design | 4 |
| COMM6504018 | Digital Branding | 2 |
| | Total SCU | 10 |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ENPR6196002 | Market Intelligence | 2 |
| COMP6687004 | User Experience Design | 4 |
| DSGN6844023 | Prototyping Digital Future | 4 |
| | Total SCU | 10 |

## 14. Minor Program: Designpreneur

**Fundamental Courses**

| Course | | SCU |
|---|---|---|
| ENTR6525032 | Fundamental of Designpreneur | 4 |
| COMP6688031 | UI/UX Development | 4 |
| DSGN6797034 | Surface Packaging Design | 4 |
| ENTR6526032 | Hospitality and Service Design | 4 |
| DSGN6843033 | Project Design | 4 |
| | Total SCU | 20 |

## 15. Minor Program: Metaverse in Business

**Fundamental Courses**

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

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| ISYS6778052 | Data Analytics | 2 |
| DSGN6981053 | Design Thinking | 4 |
| DSGN6980053 | Interface Design | 4 |
| | Total SCU | 10 |

## 16. Minor Program: Content Creation

**Fundamental Courses**

| Course | | SCU |
|---|---|---|
| FILM6105009 | Filmmaking Fundamental | 4 |
| MKTG6392055 | Digital marketing | 4 |
| DSIN6042053 | Photography for Creators | 2 |
| | **Total SCU** | **10** |

**Supporting Courses**

| Course | | SCU |
|---|---|---|
| DSGN6990053 | Creative Storytelling | 4 |
| DSIN6043053 | Strategic Influence | 2 |
| DSIN6041053 | Introduction to Visual Communication Design | 4 |
| | **Total SCU** | **10** |

### Multidisciplinary Stream Scheme

| Multidisciplinary Stream | Semester 4 | Semester 5 |
|---|---|---|
| **Stream @Greater Jakarta** | | |
| Japanese Language & Business Culture | V | V |
| English as Foreign Language Learning | V | V |
| English for Business Professionals | V | V |
| English for Specific Academic Purposes | V | V |
| Corporate Communication | - | - |
| Strategic Digital Production | - | - |

### 1. Multidisciplinary Stream: Japanese Language & Business Culture

**Stream Courses**

| Course | | SCU |
|---|---|---|
| JAPN6032025 | Japanese Work Ethics (*Bijinesu Mana-*) | 2 |
| JAPN6117025 | Intermediate Japanese (*Chuukyuu Bunpou*) | 4 |
| JAPN6118025 | Text Analysis (*Chuukyuu Dokkai*) | 4 |
| JAPN6203025 | Intermediate Listening Comprehension (*Chuukyuu Choukai*) | 4 |
| JAPN6202025 | Japanese in Translation II (*Nihongo Honyaku II*) | 4 |
| JAPN6165025 | Advanced Linguistics (*Gengogaku II*) | 2 |
| | **Total SCU** | **20** |

### 2. Multidisciplinary Stream: English as Foreign Language Learning

**Stream Courses**

| Course | | SCU |
|---|---|---|
| EDUC6051024 | English Language Learning Fundamentals | 4 |
| EDUC8003024 | English for Specific Purposes: Second Language Learning | 2 |
| EDUC6053024 | Print & Digital Literacy | 2 |
| EDUC6054024 | Classroom Communication and Learning | 4 |

| Course | | SCU |
|---|---|---|
| EDUC6055024 | Teaching BIPA | 2 |
| EDUC6056024 | Current Issues in Foreign Language Learning | 2 |
| EDUC6057024 | Language Testing | 4 |
| | Total SCU | 20 |

### 3. Multidisciplinary Stream: English for Business Professionals

**Stream Courses**

| Course | | SCU |
|---|---|---|
| ENGL6154024 | English for Business Communications | 4 |
| ENGL6258024 | English for Global Leadership | 2 |
| ENGL6169024 | English for Professionals | 2 |
| MKTG6112024 | Language Innovations in Marketing and Advertising | 2 |
| COMM6506024 | Current Issues in Business Communications | 2 |
| ENGL6244024 | Social Media Broadcasting | 4 |
| ENGL6245024 | Business Rhetoric | 4 |
| | Total SCU | 20 |

### 4. Multidisciplinary Stream: English for Specific Academic Purposes

**Stream Courses**

| Course | | SCU |
|---|---|---|
| ENGL6259024 | Reading Skills for Academic Study | 4 |
| ENGL6260024 | Text Analysis for Paper Writing | 4 |
| ENGL6261024 | Style and Rhetoric | 4 |
| ENGL6262024 | Presentation Skills | 4 |
| ENGL6263024 | Advanced Seminar and Poster Presentation | 4 |
| | Total SCU | 20 |

### Appendix: Free Electives (4th Semester & 5th Semester)

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|---|---|---|---|---|---|
| 1 | Business Management | MGMT6365005 | Current Issue in Service Business and Technology | 2 | 4 |
| 2 | Business Management | MGMT6401005 | Digital Supply Chain Management | 2 | 4 |
| 3 | Business Management | MKTG6324005 | Retail Marketing Management | 2 | 5 |
| 4 | Global Business Marketing | MKTG6321005 | Marketing Data Analytics | 4 | 4 |
| 5 | Global Business Marketing | MKTG6237005 | Global Strategic Marketing: Asia Pasific Perspective | 4 | 5 |
| 6 | International Business Management | BUSS6223005 | Trade in Asia | 2 | 5 |
| 7 | International Business Management | MGMT6357005 | Multinational Corporation Management | 4 | 5 |
| 8 | International Business Management | MGMT6458005 | Global Supply Chain Management | 2 | 4 |
| 9 | Management | BUSS6109005 | Business Development | 4 | 4 |
| 10 | Management | ISYS6744005 | E-Business Strategy and Implementation | 4 | 4 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|----|------------------------|-------------|-------------|-----|----------|
| 11 | Management | ISYS6079005 | E-Business System | 4 | 4 |
| 12 | Management | MGMT6196005 | Project Management | 4 | 4 |
| 13 | Management | MGMT6297005 | Operations Management | 4 | 5 |
| 14 | Management | MGMT6341005 | Strategic Management | 4 | 4 |
| 15 | Management | MGMT6374005 | Analysis on E-Business Investment | 4 | 4 |
| 16 | Hotel Management | HTMN6001021 | Introduction to Hospitality | 4 | 5 |
| 17 | Hotel Management | HTMN6147021 | Hospitality Management | 4 | 5 |
| 18 | Marketing Communication | COMM6533019 | Creative Program Design | 2/2 | 5 |
| 19 | Marketing Communication | COMM6541019 | Digital Corporate Communication | 2/2 | 5 |
| 20 | Marketing Communication | COMM6624019 | Digital Creative Content | 2/2 | 5 |
| 21 | Tourism | BUSS6137022 | Tourism E-Business | 4 | 5 |
| 22 | Tourism | TRSM6142022 | Event Management | 4 | 5 |
| 23 | Tourism | TRSM6212022 | Indonesian Culture | 4 | 5 |
| 24 | Civil Engineering | CIVL6080013 | Construction Methods & Heavy Equipment | 2 | 5 |
| 25 | Civil Engineering | COMP6046013 | Computer Applications in Construction Management | 2 | 5 |
| 26 | Computer Engineering | CPEN6126010 | Cross Platform Application Development | 4 | 5 |
| 27 | Computer Engineering | CPEN6220010 | Computer Networks & Information Security | 4/1 | 5 |
| 28 | Computer Engineering | CPEN6225010 | Telco Network & Switching System | 2 | 5 |
| 29 | Computer Engineering | CPEN6232010 | Cloud Technology Practice | 2 | 5 |
| 30 | Food Technology | CPEN6235015 | IoT in Food Industry | 2 | 5 |
| 31 | Food Technology | FOOD6073015 | Current Issues in Food Technology | 2 | 5 |
| 32 | Industrial Engineering | ISYE6041011 | Engineering Economy | 2 | 4 |
| 33 | Industrial Engineering | ISYE6113011 | Leadership & Organizational Behavior | 2 | 5 |
| 34 | Industrial Engineering | ISYE6181011 | System Engineering & Analysis | 2 | 4 |
| 35 | Business Law | LAWS6017028 | Intellectual Property Rights | 4 | 5 |
| 36 | Business Law | LAWS6052028 | Bankruptcy Law | 2 | 5 |
| 37 | Business Law | LAWS6110028 | Cyber Law | 2 | 5 |
| 38 | Business Law | LAWS6167028 | Legal Philosophy & Professional Ethics | 2 | 5 |
| 39 | Business Law | LAWS6171028 | Business Competition & Consumer Protection Law | 2 | 5 |
| 40 | Business Law | LAWS6176028 | Tax Law | 2 | 5 |
| 41 | Chinese Literature | CHIN6157026 | Chinese Business for Etiquette (Beginner) | 4 | 5 |
| 42 | Chinese Literature | CHIN6159026 | Chinese Character Writing | 2 | 5 |
| 43 | English Literature | ENGL6169024 | English for Professionals | 2 | 5 |
| 44 | English Literature | ENGL6244024 | Social Media Broadcasting | 4 | 5 |
| 45 | English Literature | SOCS6021024 | Social and Digital Media Writing | 2 | 5 |
| 46 | International Relations | INTR6162029 | Multiculturalism and Digital Society | 2 | 4 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|----|------------------------|-------------|-------------|-----|----------|
| 47 | International Relations | INTR6180029 | Introduction to International Media | 2 | 5 |
| 48 | International Relations | INTR6158029 | Indonesia's Defense and Security Policy | 2 | 4 |
| 49 | International Relations | INTR6178029 | Introduction to International Political Economy | 2 | 5 |
| 50 | Japanese Literature | JAPN6036025 | Japanese Tourism (Nihon Kankou) | 2 | 5 |
| 51 | Japanese Literature | JAPN6104025 | Japanese Industry and Technology | 2 | 5 |
| 52 | Japanese Literature | JAPN6111025 | Introductory Japanese I | 4 | 5 |
| 53 | Japanese Literature | JAPN6148025 | Japanese Letter I (Kanji I) | 2 | 5 |
| 54 | Primary Teacher Education | EDUC6018030 | Micro Teaching | 4 | 5 |
| 55 | Primary Teacher Education | EDUC6041030 | Current Issues in Primary Education | 2 | 5 |
| 56 | Primary Teacher Education | EDUC6073030 | ICT for Distance Learning | 4 | 5 |
| 57 | Psychology | PSYC6124027 | Psychology of Early Childhood Education | 4 | 5 |
| 58 | Psychology | PSYC6125027 | Psychology of Special Needs Education | 4 | 5 |
| 59 | Psychology | PSYC6130027 | Human Performance Technology | 4 | 5 |
| 60 | Psychology | PSYC6191027 | E-Learning Psychology | 4 | 5 |
| 61 | Psychology | PSYC6215027 | Leadership and Organizational Behaviour | 4 | 5 |
| 62 | Finance | FINC6010020 | International Finance | 2 | 5 |
| 63 | Finance | FINC6189020 | Introduction to Financial Market and Fin-Tech | 2 | 5 |
| 64 | Cyber Security | COMP6542001 | Computer Security Fundamental | 2 | 5 |
| 65 | Data Science | DTSC6005001 | Data Mining and Visualization | 2/1 | 4 |
| 66 | Computer Science | COMP6590001 | Geographical Information System | 2/2 | 5 |
| 67 | Computer Science | COMP6823001 | Multimedia Systems | 2 | 4 |
| 68 | Computer Science | COMP7128001 | Game Design | 2 | 4 |
| 69 | Computer Science | COMP8129001 | User Experience | 2/2 | 4 |
| 70 | Computer Science | COMP6821001 | Web Programming | 2 | 5 |
| 71 | Computer Science | COMP7116001 | Computer Vision | 2/2 | 5 |
| 72 | Mobile Application & Technology | MOBI6070001 | Embedded System and Internet of Things | 3 | 5 |
| 73 | Data Science | DTSC6006001 | Machine Learning | 2/1 | 5 |
| 74 | Mobile Application & Technology | MOBI6059001 | Mobile Programming | 2 | 5 |
| 75 | Game Application and Technology | GAME6085001 | Object Oriented Game Programming | 2 | 5 |
| 76 | Cyber Security | COMP6549001 | Software Security | 2 | 4 |
| 77 | Mobile Application & Technology | MOBI6068001 | Web Design | 2 | 5 |
| 78 | Animation | DSGN6689007 | Concept Art & Production Design | 2 | 5 |
| 79 | Creative Advertising | DSGN6732007 | Photography | 4 | 4 |
| 80 | Creative Advertising | DSGN6671007 | Creative Writing for Commercials | 4 | 4 |
| 81 | Film | FILM6026009 | History of Indonesian Cinema | 2 | 4 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|---|---|---|---|---|---|
| 82 | Film | FILM6059009 | Global Cinema | 4 | 5 |
| 83 | Interior Design | DSGN6612008 | Design Trend | 2 | 5 |
| 84 | New Media | DSGN6743007 | Digital Graphic Reproduction | 4 | 5 |
| 85 | Business Information Technology | ISYS6574003 | Information Retrieval | 4 | 4 |
| 86 | Business Information Technology | ISYS6577003 | Machine Learning & Foundations | 2 | 4 |
| 87 | Business Information Technology | ISYS6579003 | Knowledge-Based AI: Cognitive Systems | 4 | 5 |
| 88 | Business Information Technology | ISYS6606003 | Smart Application | 2 | 4 |
| 89 | Information Systems | BUSS6043003 | Introduction to E-Business | 4 | 4 |
| 90 | Information Systems | ISYS6203003 | Mobile Application Development | 2/2 | 4 |
| 91 | Information Systems | ISYS6016003 | Social Media Fundamental | 2 | 4 |
| 92 | Information Systems | ISYS6196003 | Business Analytics | 2 | 5 |
| 93 | Information Systems | ISYS6199003 | Data & Text Mining | 4 | 5 |
| 94 | Information Systems | ISYS6202003 | Social Informatics | 4 | 5 |
| 95 | Information Systems | ISYS6210003 | Data Visualization | 2 | 4 |
| 96 | Information Systems | ISYS6285003 | Digital and New Media | 2 | 4 |
| 97 | Information Systems | ISYS6289003 | Collaborative Computing | 4 | 5 |
| 98 | Information Systems | ISYS6402003 | Business Analytics | 2/2 | 5 |
| 99 | Information Systems | ISYS6594003 | Coding for Finance | 2 | 4 |
| 100 | Information Systems | ISYS8066003 | Business Process Management | 4 | 5 |

**Enrichment Program I (6th Semester) & Enrichment Program II (7th 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 | |
| 18 | | v | | | | | | | | | | | | v | |

| Track | Semester 6 | | | | | | | Semester 7 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IN | RS | EN | CD | SA | IS | etc | IN | RS | EN | CD | SA | IS | FS | etc |
| 19 | | | | | | v | | v | | | | | | | |
| 20 | | | | | | v | | | | | v | | | | |
| 21 | | | | | | v | | | | | | v | | | |

**Note:**

| | | | |
|---|---|---|---|
| IN | : Internship | SA | : Study Abroad |
| RS | : Research | FS | : Further Study |
| EN | : Entrepreneurship | IS | : Certified Specific Independent Study |
| CD | : Community Development | etc | : Study Program Special Purposes |

**Description:**

1. Students will take only one track in each Enrichment Program.
2. Students who failed in Enrichment Program I can retake according to the table above.
3. As for Enrichment Program II, students who failed should retake the same track, except Certified Specific Independent Study.
4. For those who failed in the Certified Study Abroad track will retake the courses from the home campus.

## Certified Internship Track

| Code | Course Name | SCU | Total |
|---|---|---|---|
| **Enrichment Program I** | | | |
| COMP6426001 | Industrial Experience in Information Technology | 8 | 20 |
| COMP6762001 | Information Technology Practice in Industrial Experience | 8 | |
| COMP6514001 | EES in Information Technology Industry | 4 | |
| **Enrichment Program II** | | | |
| COMP6429001 | Professional Experience in Information Technology | 8 | 20 |
| COMP6763001 | Information Technology Practice in Professional Experience | 8 | |
| COMP6430001 | Professional Development in Information Technology Industry | 4 | |

## Certified Entrepreneurship Track

| Code | Course Name | SCU | Total |
|---|---|---|---|
| **Enrichment Program I** | | | |
| ENTR6943001 | New Venture Initiation in Computer Science | 8 | 20 |
| ENTR6945001 | Computer Science Product Development Process | 8 | |
| ENTR6947001 | EES in New Computer Science Business I | 4 | |
| **Enrichment Program II** | | | |
| ENTR6944001 | Computer Science Product Launching | 8 | 20 |
| ENTR6946001 | Computer Science Business Development | 8 | |
| ENTR6948001 | EES in New Computer Science Business II | 4 | |

**Certified Research Track**

| Code | Course Name | SCU | Total |
|---|---|---|---|
| **Enrichment Program I** | | | |
| RSCH6565001 | Research Experience I in Computer Science | 8 | 20 |
| RSCH6567001 | Scientific Writing I in Computer Science | 8 | |
| RSCH6569001 | Global EES I (Team Work, Communication, Problem Solving & Decision Making) in Computer Science | 4 | |
| **Enrichment Program II** | | | |
| RSCH6566001 | Research Experience II in Computer Science | 8 | 20 |
| RSCH6568001 | Scientific Writing II in Computer Science | 8 | |
| RSCH6570001 | Global EES II (Self-Management, Planning & Organizing, Initiative & Enterprise) | 4 | |

**Certified Community Development Track**

| Code | Course Name | SCU | Total |
|---|---|---|---|
| **Enrichment Program I** | | | |
| CMDV6159001 | Community Outreach Project Implementation | 8 | 20 |
| CMDV6343001 | Community Outreach IT Project Design | 8 | |
| CMDV6208001 | Employability and Entrepreneurial Skills in Computer Science Community | 4 | |
| **Enrichment Program II** | | | |
| CMDV6184001 | Community Development Project Implementation | 8 | 20 |
| CMDV6344001 | Community Development IT Project Design | 8 | |
| CMDV6193001 | Employability and Entrepreneurial Skills in Computer Science Community Development | 4 | |

**Certified Study Abroad Track**

| Code | Course Name | SCU | Total |
|---|---|---|---|
| **Elective courses list for study abroad\*** | | | |
| **Enrichment Program I** | | | |
| GLOB6005001 | Elective Course for Study Abroad 1 | 4 | 20 |
| GLOB6006001 | Elective Course for Study Abroad 2 | 4 | |
| GLOB6007001 | Elective Course for Study Abroad 3 | 4 | |
| GLOB6008001 | Elective Course for Study Abroad 4 | 4 | |
| GLOB6009001 | Elective Course for Study Abroad 5 | 2 | |
| GLOB6010001 | Elective Course for Study Abroad 6 | 2 | |
| GLOB6011001 | Elective Course for Study Abroad 7 | 2 | |
| GLOB6012001 | Elective Course for Study Abroad 8 | 2 | |
| GLOB6013001 | Elective Course for Study Abroad 9 | 2 | |
| GLOB6014001 | Elective Course for Study Abroad 10 | 2 | |
| GLOB6015001 | Elective Course for Study Abroad 11 | 2 | |
| GLOB6016001 | Elective Course for Study Abroad 12 | 2 | |
| GLOB6251001 | Elective Course for Study Abroad 29 | 4 | |
| **Enrichment Program II** | | | |
| GLOB6017001 | Elective Course for Study Abroad 13 | 4 | 20 |
| GLOB6018001 | Elective Course for Study Abroad 14 | 4 | |

| Code | Course Name | SCU | Total |
|------|-------------|-----|-------|
| GLOB6019001 | Elective Course for Study Abroad 15 | 4 | |
| GLOB6020001 | Elective Course for Study Abroad 16 | 4 | |
| GLOB6021001 | Elective Course for Study Abroad 17 | 2 | |
| GLOB6022001 | Elective Course for Study Abroad 18 | 2 | |
| GLOB6023001 | Elective Course for Study Abroad 19 | 2 | |
| GLOB6024001 | Elective Course for Study Abroad 20 | 2 | |
| GLOB6025001 | Elective Course for Study Abroad 21 | 2 | |
| GLOB6026001 | Elective Course for Study Abroad 22 | 2 | |
| GLOB6027001 | Elective Course for Study Abroad 23 | 2 | |
| GLOB6028001 | Elective Course for Study Abroad 24 | 2 | |
| GLOB6253001 | 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.*

**Certified Specific Independent Study**

| Code | Course Name | SCU | Total |
|------|-------------|-----|-------|
| **Elective courses list for certified specific independent study*** | | | |
| CSIS6001001 | Course Certification | 3 | |
| CSIS6002001 | Technical Skill Enrichment | 4 | |
| CSIS6003001 | Industrial Project | 9 | |
| CSIS6004001 | Soft Skill Enrichment | 4 | |
| CSIS6005001 | Elective Course for Specific Independent Study 1 | 8 | |
| CSIS6006001 | Elective Course for Specific Independent Study 2 | 8 | |
| CSIS6007001 | Elective Course for Specific Independent Study 3 | 6 | |
| CSIS6008001 | Elective Course for Specific Independent Study 4 | 6 | |
| CSIS6009001 | Elective Course for Specific Independent Study 5 | 6 | |
| CSIS6010001 | Elective Course for Specific Independent Study 6 | 5 | |
| CSIS6011001 | Elective Course for Specific Independent Study 7 | 5 | |
| CSIS6012001 | Elective Course for Specific Independent Study 8 | 5 | |
| CSIS6013001 | Elective Course for Specific Independent Study 9 | 5 | 20 |
| CSIS6014001 | Elective Course for Specific Independent Study 10 | 4 | |
| CSIS6015001 | Elective Course for Specific Independent Study 11 | 4 | |
| CSIS6016001 | Elective Course for Specific Independent Study 12 | 4 | |
| CSIS6017001 | Elective Course for Specific Independent Study 13 | 4 | |
| CSIS6018001 | Elective Course for Specific Independent Study 14 | 4 | |
| CSIS6019001 | Elective Course for Specific Independent Study 15 | 3 | |
| CSIS6020001 | Elective Course for Specific Independent Study 16 | 3 | |
| CSIS6021001 | Elective Course for Specific Independent Study 17 | 3 | |
| CSIS6022001 | Elective Course for Specific Independent Study 18 | 3 | |
| CSIS6023001 | Elective Course for Specific Independent Study 19 | 3 | |
| CSIS6024001 | Elective Course for Specific Independent Study 20 | 3 | |
| CSIS6025001 | Elective Course for Specific Independent Study 21 | 2 | |
| CSIS6026001 | Elective Course for Specific Independent Study 22 | 2 | |

| Code | Course Name | SCU | Total |
|------|-------------|-----|-------|
| CSIS6027001 | Elective Course for Specific Independent Study 23 | 2 | |
| CSIS6028001 | Elective Course for Specific Independent Study 24 | 2 | |
| CSIS6029001 | Elective Course for Specific Independent Study 25 | 2 | |
| CSIS6030001 | Elective Course for Specific Independent Study 26 | 2 | |
| CSIS6031001 | Elective Course for Specific Independent Study 27 | 2 | |
| CSIS6032001 | Elective Course for Specific Independent Study 28 | 2 | |
| CSIS6033001 | Elective Course for Specific Independent Study 29 | 1 | |
| CSIS6034001 | Elective Course for Specific Independent Study 30 | 1 | |
| CSIS6035001 | Elective Course for Specific Independent Study 31 | 1 | |
| CSIS6036001 | 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.*

**Further Study Track**

| Code | Course Name | SCU | Total |
|------|-------------|-----|-------|
| **Enrichment Program II** | | | |
| COMP6815001 | IT Disaster Recovery | 4 | 20 |
| COMP6816001 | Wireless and Cloud Computing Technologies | 4 | |
| COMP6817001 | Internet Tools and Services | 4 | |
| COMP6818001 | Cyber Risk Management | 4 | |
| COMP6819001 | Knowledge Engineering | 4 | |

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

| No. | Course Code | Course Name | Minimal Grade |
|-----|-------------|-------------|---------------|
| 1. | CHAR6013001 | Character Building: Pancasila | B |
| 2. | ENTR6511001 | Entrepreneurship: Market Validation | C |
| 3. | COMP6047001 | Algorithm and Programming* | C |
| 4. | COMP6048001 | Data Structures* | C |
| 5. | COMP6798001 | Program Design Methods* | C |
| 6. | COMP6100001 | Software Engineering* | C |
| 7. | COMP6799001 | Database Technology | C |
| 8. | COMP6697001 | Operating System | C |

*) Tutorial & Multipaper