

Food Technology

Introduction

The food Technology Study Program at Bina Nusantara University is aimed at students who are interested to learn deeply about foods and their production processes, to fulfil United Nations' Sustainable Development Goals of (1) zero hunger, and (2) good health and well-being, by understanding the design and production of foods with health benefits. The food Technology Program concerns the application of biological, chemical, and engineering sciences to further understand and improve the quality, safety, nutritional, and economic value of food and beverages on an industrial scale.

The Study Program is designed not only to meet the market needs but also to produce creative, innovative and productive graduates who are capable of food product innovation, with a strong emphasis on engineering sciences, and providing graduates with *entrepreneurship* in food technology to meet global challenges on food security.

The Study Program links to national and multinational food industries and universities all over the world are strong, and there will be a one-year enrichment program, with five tracks namely, Study Abroad, Internship, Entrepreneurship, Research, Independent Study, Community Development and Further Study to enrich the theory obtained in the campus.

Facilities in the Study Program include well-equipped laboratories, namely Food Biotechnology, Food Processing, Science (Chemistry/Biochemistry), Sensory, Physics, Nutrition and Computer Laboratories.

Vision

A world-class Food Technology Study Program, fostering and empowering the society through digital technology for food innovation

Mission

The missions of Food Technology Study Program are :

1. Educating BINUSIAN through holistic approach in food science and technology that meet global standard
2. Answering food-related global issue by high quality and impactful research through digital technology for food innovation
3. Fostering BINUSIAN as life-long learner through self-enrichment in food technology
4. Empowering BINUSIAN to continuously improve society's quality of life through digital technology for food innovation

Program Objectives

The objectives of the program are:

1. To produce graduates that meet global standard that competent in the core area of food science and technology (Food Chemistry, Food Microbiology, Nutrition, and Food Engineering)
2. To produce graduates who can apply knowledge, skills, and creativity to answer a food-related global issue by high quality and impactful research through digital technology for food innovation
3. To produce professional graduates with spirit in self-enrichment and life-long learning in Food Technology
4. To produce graduates with commitment and ability in empowering society through digital technology for food innovation

Student Outcomes

After completing the study, graduates are:

1. Able to apply knowledge in core area of food science and technology
2. Able to integrate their knowledge in food science and technology
3. Able to demonstrate proficiency communication, professionalism, and leadership skills.
4. Able to apply functional food and food packaging knowledges to enhance the values in innovated food products
5. Able to apply interdisciplinary knowledge and skills in developing alternative solutions for problem-solving.

Prospective Career of the Graduates

Food Product or Ingredient Development Scientist
Quality Control Supervisor in Food Industry
Quality Assurance System Developer in Food Industry
Food Analyst
Regulatory affairs specialist
Food Production Coordinator
Food Marketer
Food Researcher & Educator
Food Consultant
Food Entrepreneur

Curriculum

The food Technology Study Program is a solid foundation of knowledge and understanding to contribute to multinational food industries. Students will be equipped with methodological and computational skills as well as practical laboratory skills such as operating equipment effectively and efficiently through direct involvement in problem-solving essentially required in research and food industries.

The curriculum of the Food Technology Study Program is specially structured to solve contemporary issues and to produce innovation in Food Technology with IT support.

Course Structure

| Sem | Code | Course Name | SCU | Total |
|---------------------------------|---------------------------------|--|-----|-------|
| 1 | CHAR6013015 | Character Building: Pancasila | 2 | 20 |
| | FOOD6015015 | Introduction to Food Technology* | 2 | |
| | MATH6157015 | Calculus | 2/1 | |
| | SCIE6024015 | Biology | 2/1 | |
| | SCIE6053015 | Chemistry* | 4/2 | |
| | LANG6027015 | Indonesian | 2 | |
| | STAT6201015 | Basic Statistic | 2 | |
| | Foreign Language Courses | | | |
| 2 | CHAR6014015 | Character Building: Kewarganegaraan | 2 | 20 |
| | SCIE6021015 | Organic Chemistry | 2/1 | |
| | FOOD6048015 | General Physics | 2/1 | |
| | FOOD6049015 | Basic Food Biochemistry*&*** | 2/1 | |
| | SCIE6026015 | Basic Microbiology*&*** | 2/1 | |
| | FOOD6052015 | Food Law and Regulation** | 2 | |
| | ENTR6509001 | Entrepreneurship: Ideation | 2 | |
| | FOOD6087015 | Scientific Communication in Food Technology* | 2 | |
| Foreign Language Courses | | | 0 | |
| 3 | CHAR6015015 | Character Building: Agama | 2 | 20 |
| | FOOD6082015 | Food Chemistry*&*** | 2/1 | |
| | FOOD6004015 | Sensory Evaluation* | 2/1 | |
| | FOOD6088015 | Food Processing Technology I** | 2/2 | |
| | ENTR6510001 | Entrepreneurship: Prototyping | 2 | |
| | FOOD6095015 | Unit Operation | 2 | |
| | FOOD6090015 | Advanced Statistic in Food Technology | 2 | |
| | Foreign Language Courses | | | |
| 4 | ENTR6511001 | Entrepreneurship: Market Validation | 2 | 20 |
| | FOOD6077015 | Food Microbiology*&*** | 2/1 | |
| | FOOD6085015 | Food Innovation & Product Development | 2 | |
| | FOOD6056015 | Food Engineering*&*** | 2/2 | |

| Sem | Code | Course Name | SCU | Total |
|---------------------------------|---|---|-----|-------|
| | FOOD6091015 | Food Safety & Sanitation* | 2 | |
| | FOOD6003015 | Food Analysis** | 2/2 | |
| | FOOD6089015 | Food Quality Assurance System** | 2 | |
| | FOOD6051015 | Human Nutrition* | 2/1 | |
| | Foreign Language Courses | | | |
| 5 | Stream: Innovative Food Processing | | | 20 |
| | FOOD6092015 | Molecular Gastronomy | 2 | |
| | FOOD6074015 | Food Processing Technology II | 2 | |
| | FOOD6076015 | Food Fermentation Technology* | 2 | |
| | FOOD6073015 | Current Issues in Food Technology** | 2 | |
| | CPEN6235015 | IoT in Food Industry | 2 | |
| | FOOD6094015 | Nutrition & Health | 4 | |
| | FOOD6086015 | Food Packaging, Labeling and Shelf-life*&** | 4 | |
| | FOOD6065015 | Functional Foods & Nutraceuticals* | 2 | |
| | Minor Program | | | |
| Free Electives | | | 20 | |
| Multidisciplinary Stream | | | 20 | |
| 6 | Enrichment Program I | | 20 | 20 |
| 7 | Enrichment Program II | | 20 | 20 |
| 8 | FOOD6078015 | Pre – Thesis | 2 | 6 |
| | FOOD6079015 | Thesis | 4 | |
| | FOOD6071015 | Thesis | 6 | |
| TOTAL CREDIT 146 SCU | | | | |

*) This course is delivered in English

***) Entrepreneurship Embedded

***) Global Learning System Course

Streaming/Free Electives:

-) For 5th 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.

English University Courses:

-) For 1st Semester: English University Courses I, student with score BINUS UNIVERSITY English Proficiency Test less than 500 will take English in Focus, and student with score test greater than or equal to 500 will take English for Business Presentation

-) For 2nd Semester: English University Courses II, student with score BINUS UNIVERSITY English Proficiency Test less than 500 will take English Savvy, and student with score test greater than or equal to 500 will take English for Written Business Communication

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 |
|--------------------------|-------------------------------|-----|
| ENGL6253010 | English for Frontrunners | 0 |
| ENGL6254010 | English for Independent Users | 0 |
| ENGL6255010 | English for Professionals | 0 |
| JAPN6190010 | Basic Japanese Language | 0 |
| CHIN6163010 | 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 |
|---------------------------------------|------------|
| Minor @ Binus Kemanggisian | |
| Digital Ecosystem | v |
| Human Capital in Digital Workplace | v |
| Sustainable Development | v |
| Cross Cultural Communication | v |
| Interactive & Users Experience Design | v |
| Data Analytics | v |
| Robotic Process Automation | v |
| Minor @ Binus Alam Sutera | |
| Digital Transformation | v |
| Minor @ Binus Bekasi | |
| Virtual Services Experience | v |
| Culinary | v |
| Minor @ Binus Malang | |
| Digital Technopreneur | v |
| Minor @ Binus Bandung | |
| DesignPreneur | v |
| Minor @ Binus Semarang | |
| Metaverse in Business | v |

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. Digital Ecosystem

Fundamental Courses

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

2. 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 | 10 |

3. 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 |

4. 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 |

5. 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 |

6. 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 |

7. 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 |

8. 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 |

9. Virtual Services Experience

Fundamental Courses

| Course | SCU |
|--|-----------|
| ISYS6561003 Fundamental of Virtual Services | 2 |
| ACCT6350020 Virtual Financial Services | 4 |
| MGMT6354005 Virtual Operation and Supply Chain | 4 |
| Total SCU | 10 |

10. Culinary

Fundamental Courses

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

11. Digital Technopreneur

Fundamental Courses

| Course | | SCU |
|------------------|-------------------------------|-----------|
| ENTR6528002 | The Entrepreneurial Innovator | 4 |
| DSGN6839006 | Interactive Design | 4 |
| COMM6504018 | Digital Branding | 2 |
| ENPR6196002 | Market Intelligence | 2 |
| COMP6687004 | User Experience Design | 4 |
| DSGN6844023 | Prototyping Digital Future | 4 |
| Total SCU | | 10 |

12. 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 | | 10 |

13. Metaverse in Business

Fundamental Courses

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

Appendix: Free Electives (5th 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 | Business Management | MKTG6324005 | Retail Marketing Management | 2 | 5 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|----|-----------------------------------|-------------|---|-----|----------|
| 5 | Business Management | MGMT6461005 | Category Management | 2 | 5 |
| 6 | Management | MGMT6297005 | Operations Management | 4 | 5 |
| 7 | Management | FINC6001005 | Financial Management | 4 | 5 |
| 8 | Global Business Marketing | MKTG6321005 | Marketing Data Analytics | 4 | 5 |
| 9 | Global Business Marketing | MKTG6322005 | Sales and Customer Relationship Management | 4 | 5 |
| 10 | Global Business Marketing | MKTG6237005 | Global Strategic Marketing : Asia Pasific Perspective | 4 | 5 |
| 11 | Global Business Marketing | MKTG6270005 | Retail and Omni Channel | 2 | 5 |
| 12 | Global Business Marketing | MKTG6272005 | Marketing Research | 2/2 | 5 |
| 13 | Global Business Marketing | MGMT6358005 | Managing Business Information | 2/2 | 5 |
| 14 | International Business Management | MGMT6357005 | Multinational Corporation Management | 4 | 5 |
| 15 | International Business Management | BUSS6223005 | Trade in Asia | 2 | 5 |
| 16 | International Business Management | BUSS6224005 | Special Topics in International Business | 4 | 5 |
| 17 | Computer Engineering | CPEN6098010 | Computer Networks | 2/2 | 5 |
| 18 | Computer Engineering | CPEN6126010 | Cross Platform Application Development | 4 | 5 |
| 19 | Computer Engineering | CPEN6225010 | Telco Network & Switching System | 2 | 5 |
| 20 | Computer Engineering | CPEN6232010 | Cloud Technology Practice | 2 | 5 |
| 21 | Computer Engineering | CPEN6220010 | Computer Networks & Information Security | 4/1 | 5 |
| 22 | Industrial Engineering | ISYE6067011 | Global Supply Chain | 2 | 5 |
| 23 | Industrial Engineering | ISYE6165011 | Supply Chain Risk & Negotiation | 2 | 5 |
| 24 | Industrial Engineering | ISYE6115011 | Transportation Modeling | 2 | 5 |
| 25 | Industrial Engineering | MKTG6128011 | Market Research | 2 | 5 |
| 26 | Industrial Engineering | ISYE6167011 | Decision Support System | 2 | 5 |
| 27 | Industrial Engineering | ISYE6168011 | Financial Engineering | 2 | 5 |
| 28 | Industrial Engineering | ISYE6130011 | Project Management | 2 | 5 |
| 29 | Industrial Engineering | ISYE6169011 | Maintenance Management Systems | 2 | 5 |
| 30 | Industrial Engineering | ISYE6170011 | Sustainable Engineering Systems | 2 | 5 |
| 31 | Industrial Engineering | ISYE6113011 | Leadership & Organizational Behavior | 2 | 5 |
| 32 | Food Technology | FOOD6092015 | Molecular Gastronomy | 2 | 5 |
| 33 | Food Technology | FOOD6074015 | Food Processing Technology II | 2 | 5 |
| 34 | Food Technology | FOOD6076015 | Food Fermentation Technology | 2 | 5 |
| 35 | Food Technology | FOOD6073015 | Current Issues in Food Technology | 2 | 5 |
| 36 | Food Technology | CPEN6235015 | IoT in Food Industry | 2 | 5 |
| 37 | Food Technology | FOOD6094015 | Nutrition & Health | 4 | 5 |
| 38 | Food Technology | COMP6800001 | Human and Computer Interaction | 2/1 | 5 |
| 39 | Computer Science | COMP6586001 | Embedded Systems | 2 | 5 |
| 40 | Computer Science | COMP6144001 | Web Programming | 2/1 | 5 |
| 41 | Computer Science | COMP6590001 | Geographical Information System | 2/2 | 5 |
| 42 | Computer Science | ISYS6197001 | Business Application Development | 2/2 | 5 |
| 43 | Computer Science | GAME6085001 | Object Oriented Game Programming | 2 | 5 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|----|---------------------------------|-------------|---|-----|----------|
| 44 | Game Application and Technology | COMM6624019 | Digital Creative Content | 2/2 | 5 |
| 45 | Marketing Communication | COMM6620019 | Online Publishing | 2/2 | 5 |
| 46 | Marketing Communication | COMM6533019 | Creative Program Design | 2/2 | 5 |
| 47 | Marketing Communication | COMM6510019 | Reportage & Interview Technique | 2/2 | 5 |
| 48 | Marketing Communication | COMM6622019 | Audio Journalism | 2/2 | 5 |
| 49 | Marketing Communication | COMM6410019 | Digital Broadcasting Production | 2/2 | 5 |
| 50 | Marketing Communication | COMM6630019 | Crisis Communication | 2 | 5 |
| 51 | Marketing Communication | COMM6631019 | Public Affair | 2 | 5 |
| 52 | Marketing Communication | COMM6633019 | Corporate Sustainability | 4 | 5 |
| 53 | Marketing Communication | COMM6632019 | Writing for Corporate Communication | 2/2 | 5 |
| 54 | Marketing Communication | COMM6541019 | Digital Corporate Communication | 2/2 | 5 |
| 55 | Marketing Communication | COMM6634019 | Environmental Issues and Brand Activism | 4 | 5 |
| 56 | Marketing Communication | COMM6635019 | Integrated Marketing Communication | 2 | 5 |
| 57 | Marketing Communication | COMM6637019 | Brand Activation | 2/2 | 5 |
| 58 | Marketing Communication | COMM6638019 | Social Media Planning & Engagement | 2/2 | 5 |
| 59 | Marketing Communication | TRSM6218022 | Adventure Tourism Management | 4 | 5 |
| 60 | Tourism | TRSM6219022 | Wildlife and Marine Tourism | 2 | 5 |
| 61 | Tourism | TRSM6220022 | Rural Tourism Entrepreneurship | 4 | 5 |
| 62 | Tourism | TRSM6221022 | Sport Tourism | 2 | 5 |
| 63 | Tourism | TRSM6222022 | Climate Change & Tourism | 2 | 5 |
| 64 | Tourism | BUSS6137022 | Tourism E-Business | 4 | 5 |
| 65 | Tourism | TRSM6217022 | Immigration, Quarantine and Customs | 2 | 5 |
| 66 | Tourism | TRSM6140022 | Tourism Law and Regulation | 2 | 5 |
| 67 | Tourism | MGMT6408022 | Strategic Management for Tourism | 2 | 5 |
| 68 | Tourism | TRSM6225022 | Protected Area Planning & Management | 4 | 5 |
| 69 | Hotel Management | MGMT6304021 | Organization Behavior in Hospitality | 2 | 5 |
| 70 | Hotel Management | HTMN6145021 | Revenue Management in Hospitality | 2 | 5 |
| 71 | Hotel Management | HTMN6027021 | Service Management | 4 | 5 |
| 72 | Hotel Management | HTMN6146021 | Food Safety Management | 2 | 5 |
| 73 | Hotel Management | HTMN6018021 | Consumer Behavior in Hospitality | 2 | 5 |
| 74 | Hotel Management | HTMN6147021 | Hospitality Management | 4 | 5 |
| 75 | Hotel Management | HTMN6148021 | Research Methodology in Hospitality | 4 | 5 |
| 76 | Hotel Management | HTMN6001021 | Introduction to Hospitality | 4 | 5 |
| 77 | Hotel Management | HTMN6123021 | Hygiene and Safety for Hospitality | 4 | 5 |
| 78 | Hotel Management | HTMN6108021 | Food and Beverage Management | 2 | 5 |

| No | Course Owner Department | Course Code | Course Name | SCU | Semester |
|-----|---------------------------------|-------------|---|-----|----------|
| 79 | Hotel Management | HTMN6131021 | Catering Management | 2 | 5 |
| 80 | Hotel Management | HTMN6132021 | Gastronomy Study | 2 | 5 |
| 81 | Finance | FINC6189020 | Introduction to Financial Market and Fin-Tech | 2 | 5 |
| 82 | Finance | FINC6010020 | International Finance | 2 | 5 |
| 83 | Cyber Security | COMP6542001 | Computer Security Fundamental | 2 | 5 |
| 84 | Data Science | DTSC6006001 | Machine Learning | 2/1 | 5 |
| 85 | Mobile Application & Technology | MOBI6068001 | Web Design | 2 | 5 |
| 86 | Mobile Application & Technology | MOBI6070001 | Embedded System and Internet of Things | 3 | 5 |
| 87 | Mobile Application & Technology | MOBI6059001 | Mobile Programming | 2 | 5 |
| 88 | Statistics | STAT6157049 | Data Mining and Visualization | 2 | 5 |
| 89 | Information Systems | ISYS6196003 | Business Analytics | 2 | 5 |
| 90 | Information Systems | ISYS6199003 | Data & Text Mining | 4 | 5 |
| 91 | Information Systems | ISYS6202003 | Social Informatics | 4 | 5 |
| 92 | Information Systems | ISYS6289003 | Collaborative Computing | 4 | 5 |
| 93 | Information Systems | ISYS6402003 | Business Analytics | 2/2 | 5 |
| 94 | Information Systems | ISYS8066003 | Business Process Management | 4 | 5 |
| 95 | Business Information Technology | ISYS6579003 | Knowledge-Based AI: Cognitive Systems | 4 | 5 |
| 96 | Animation | DSGN6689007 | Concept Art & Production Design | 2 | 5 |
| 97 | Animation | DSGN6690007 | Animation Storytelling | 2 | 5 |
| 98 | Creative Advertising | DSGN6661007 | Photography | 4 | 5 |
| 99 | Film | FILM6059009 | Global Cinema | 4 | 5 |
| 100 | New Media | DSGN6743007 | Digital Graphic Reproduction | 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 | | | | | | | |

| Track | Semester 6 | | | | | | | Semester 7 | | | | | | | |
|-------|------------|----|----|----|----|----|-----|------------|----|----|----|----|----|----|-----|
| | IN | RS | EN | CD | SA | IS | etc | IN | RS | EN | CD | SA | IS | FS | etc |
| 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 | | | | | |

Note:

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

Description:

Student will take one of enrichment program tracks

Certified Internship Track

| Code | Course Name | SCU | Total |
|------------------------------|-----------------------------------|-----|-------|
| Enrichment Program I | | | |
| FOOD6080015 | Unit Operations in Food Industry | 8 | 20 |
| FOOD6031015 | Industrial Experience | 8 | |
| FOOD6068015 | Professionalism & Leadership | 4 | |
| Enrichment Program II | | | |
| FOOD6067015 | Self-Management & Work Ethics | 4 | 20 |
| FOOD6081015 | Integrated Food Processing | 8 | |
| FOOD6070015 | Project Management & Organization | 8 | |

Certified Entrepreneurship Track

| Code | Course Name | SCU | Total |
|------------------------------|----------------------------------|-----|-------|
| Enrichment Program I | | | |
| ENTR6591015 | New Food Venture Initiation | 8 | 20 |
| ENTR6592015 | Food Product Development Process | 8 | |
| ENTR6576015 | Professionalism & Leadership | 4 | |
| Enrichment Program II | | | |
| ENTR6594015 | Food Product Launching | 8 | 20 |
| ENTR6595015 | Food Business Development | 8 | |
| ENTR6593015 | EES in Food Business | 4 | |

Certified Research Track

| Code | Course Name | SCU | Total |
|------------------------------|-------------------------------|-----|-------|
| Enrichment Program I | | | 20 |
| RSCH6227015 | Research Experience | 8 | |
| RSCH6508015 | Experimental Design | 8 | |
| RSCH6490015 | Professionalism & Leadership | 4 | 20 |
| Enrichment Program II | | | |
| RSCH6182015 | Global EES in Food Technology | 4 | |
| RSCH6509015 | Academic Writing | 8 | |
| RSCH6492015 | Research Methodology | 8 | |

Certified Community Development Track

| Code | Course Name | SCU | Total |
|------------------------------|---|-----|-------|
| Enrichment Program I | | | 20 |
| CMDV6128015 | Community Outreach Project Implementation | 8 | |
| CMDV6288015 | Community Outreach Project for Food Processing | 8 | |
| CMDV6398015 | Professional & Leadership | 4 | 20 |
| Enrichment Program II | | | |
| CMDV6399015 | Community Outreach Post Harvesting Project | 8 | |
| GMDV6400015 | Community Outreach Food Law and Regulation | 8 | |
| CMDV6098015 | Employability and Entrepreneurial Skills in Food Technology | 4 | |

Certified Study Abroad Track

| Code | Course Name | SCU | Total |
|--|-------------------------------------|-----|-------|
| Elective courses list for study abroad* | | | 20 |
| Enrichment Program I/II | | | |
| GLOB6005010 | Elective Course for Study Abroad 1 | 4 | |
| GLOB6006010 | Elective Course for Study Abroad 2 | 4 | |
| GLOB6007010 | Elective Course for Study Abroad 3 | 4 | |
| GLOB6008010 | Elective Course for Study Abroad 4 | 4 | |
| GLOB6009010 | Elective Course for Study Abroad 5 | 2 | |
| GLOB6010010 | Elective Course for Study Abroad 6 | 2 | |
| GLOB6011010 | Elective Course for Study Abroad 7 | 2 | |
| GLOB6012010 | Elective Course for Study Abroad 8 | 2 | |
| GLOB6013010 | Elective Course for Study Abroad 9 | 2 | |
| GLOB6014010 | Elective Course for Study Abroad 10 | 2 | |
| GLOB6015010 | Elective Course for Study Abroad 11 | 2 | |
| GLOB6016010 | Elective Course for Study Abroad 12 | 2 | |
| GLOB6249010 | Elective Course for Study Abroad 27 | 3 | |
| GLOB6250010 | Elective Course for Study Abroad 28 | 3 | |
| GLOB6251010 | Elective Course for Study Abroad 29 | 4 | |

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

Certified Specific Independent Study

| Code | Course Name | SCU | Total |
|--|---|-----|-------|
| Elective courses list for certified specific independent study* | | | |
| Enrichment Program I/II | | | |
| CSIS6001010 | Course Certification | 3 | 20 |
| CSIS6002010 | Technical Skill Enrichment | 4 | |
| CSIS6003010 | Industrial Project | 9 | |
| CSIS6004010 | Soft Skill Enrichment | 4 | |
| CSIS6005010 | Elective Course for Specific Independent Study 1 | 8 | |
| CSIS6006010 | Elective Course for Specific Independent Study 2 | 8 | |
| CSIS6007010 | Elective Course for Specific Independent Study 3 | 6 | |
| CSIS6008010 | Elective Course for Specific Independent Study 4 | 6 | |
| CSIS6009010 | Elective Course for Specific Independent Study 5 | 6 | |
| CSIS6010010 | Elective Course for Specific Independent Study 6 | 5 | |
| CSIS6011010 | Elective Course for Specific Independent Study 7 | 5 | |
| CSIS6012010 | Elective Course for Specific Independent Study 8 | 5 | |
| CSIS6013010 | Elective Course for Specific Independent Study 9 | 5 | |
| CSIS6014010 | Elective Course for Specific Independent Study 10 | 4 | |
| CSIS6015010 | Elective Course for Specific Independent Study 11 | 4 | |
| CSIS6016010 | Elective Course for Specific Independent Study 12 | 4 | |
| CSIS6017010 | Elective Course for Specific Independent Study 13 | 4 | |
| CSIS6018010 | Elective Course for Specific Independent Study 14 | 4 | |
| CSIS6019010 | Elective Course for Specific Independent Study 15 | 3 | |
| CSIS6020010 | Elective Course for Specific Independent Study 16 | 3 | |
| CSIS6021010 | Elective Course for Specific Independent Study 17 | 3 | |
| CSIS6022010 | Elective Course for Specific Independent Study 18 | 3 | |
| CSIS6023010 | Elective Course for Specific Independent Study 19 | 3 | |
| CSIS6024010 | Elective Course for Specific Independent Study 20 | 3 | |
| CSIS6025010 | Elective Course for Specific Independent Study 21 | 2 | |
| CSIS6026010 | Elective Course for Specific Independent Study 22 | 2 | |
| CSIS6027010 | Elective Course for Specific Independent Study 23 | 2 | |
| CSIS6028010 | Elective Course for Specific Independent Study 24 | 2 | |
| CSIS6029010 | Elective Course for Specific Independent Study 25 | 2 | |
| CSIS6030010 | Elective Course for Specific Independent Study 26 | 2 | |
| CSIS6031010 | Elective Course for Specific Independent Study 27 | 2 | |
| CSIS6032010 | Elective Course for Specific Independent Study 28 | 2 | |
| CSIS6033010 | Elective Course for Specific Independent Study 29 | 1 | |
| CSIS6034010 | Elective Course for Specific Independent Study 30 | 1 | |
| CSIS6035010 | Elective Course for Specific Independent Study 31 | 1 | |
| CSIS6036010 | 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

For students who take the Master of Management Study Program (Stream Business Management) through the Enrichment Further Study track, the courses that have been taken in semester 1 can be equivalent to the following courses :

| Code | Course Name | SCU | Total |
|------------------------------|-------------------------------------|-----|-------|
| Enrichment Program II | | | 20 |
| ENPR6195015 | Design Thinking for Food Innovation | 4 | |
| MKTG6299015 | Business Negotiation | 4 | |
| MKTG6326015 | Food Digital Marketing Strategy | 4 | |
| STAT6213015 | Food Business Analytics | 4 | |
| MGMT6496015 | Human Resources Management | 4 | |

For students who take the Master of Management Study Program (Stream Creative Marketing) through the Enrichment Further Study track, the courses that have been taken in semester 1 can be equivalent to the following courses :

| Code | Course Name | SCU | Total |
|------------------------------|---------------------------------------|-----|-------|
| Enrichment Program II | | | 20 |
| ENPR6195015 | Design Thinking for Food Innovation | 4 | |
| MKTG6299015 | Business Negotiation | 4 | |
| MKTG6326015 | Food Digital Marketing Strategy | 4 | |
| ACCT6495015 | Financial Management in Food Business | 4 | |
| MGMT6496015 | Human Resources Management | 4 | |

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

| No. | Course Code | Course Name | Minimal Grade |
|-----|-------------|--|---------------|
| 1. | CHAR6013015 | Character Building: Pancasila | B |
| 2. | FOOD6082015 | Food Chemistry | C |
| 3. | ENTR6511001 | Entrepreneurship: Market Validation | C |
| 4. | FOOD6056015 | Food Engineering* | C |
| 5. | FOOD6085015 | Food Innovation & Product Development* | C |

| No. | Course Code | Course Name | Minimal Grade |
|-----------------------|-------------|---|---------------|
| 6. | FOOD6003015 | Food Analysis* | C |
| Stream Courses | | | |
| 7. | FOOD6065015 | Functional Food & Nutraceuticals | C |
| 8. | FOOD6086015 | Food Packaging, Labeling and Shelf-life | C |

*) Tutorial & Multipaper

