Faculty of Food Science and Technology

Bachelor of Food Science and Technology
Bachelor of Science (Food Service Management)
Bachelor of Science (Food Studies)

www.food.upm.edu.my
About UPM

Vision
To become a university of international repute

Mission
To make meaningful contributions towards wealth creation, nation building and universal human advancement through the exploration and dissemination of knowledge

The UPM Campus
UPM has 2 campuses. The Main Campus, stretching over 1,214 hectares, is in Serdang, and is about 23 kilometres south of Kuala Lumpur, the capital city of Malaysia, and approximately 45 kilometres away from the Kuala Lumpur International Airport (KLIA).

UPM’s branch campus in Bintulu, Sarawak stands over a land of 715.16 hectares, and is surrounded by lush green forest environment, rich with diverse types of flora and fauna.

Fast Facts*

<table>
<thead>
<tr>
<th>No. of Academic Staff</th>
<th>2,902</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Faculties</td>
<td>16</td>
</tr>
<tr>
<td>No. of Inbound Visiting Academic Staff</td>
<td>2,162</td>
</tr>
<tr>
<td>No. of Undergraduates</td>
<td>17,678</td>
</tr>
<tr>
<td>No. of Postgraduates</td>
<td>14,357</td>
</tr>
<tr>
<td>No. of International Students</td>
<td>3,080</td>
</tr>
<tr>
<td>No. of Inbound Exchange Students</td>
<td>550</td>
</tr>
<tr>
<td>No. of Bachelor Programmes</td>
<td>56</td>
</tr>
<tr>
<td>No. of Diploma Programmes</td>
<td>7</td>
</tr>
<tr>
<td>No. of Postgraduate Programmes</td>
<td>47</td>
</tr>
</tbody>
</table>

*As at 2010
Bachelor of Food Science & Technology

Universiti Putra Malaysia launched its Food Science and Technology undergraduate program in 1976 and in line with Malaysian government initiative and expectations, which is to train manpower in the food industry and government agencies who are competent in the field of:

- Research and Development
- Manufacturing and Production
- Technical Sales and Service
- Management
- Quality Control
- Consultation
- Inspection Services (with State or Federal Government)

To date, our faculty has produced 3773 graduates who are in the forefront in conglomerate food companies and government agencies. Our regularly updated curriculum accommodates the current developments in the field of food science and technology to meet the needs of a dynamic food industry. Our lecturers are highly qualified and adequately trained, obtaining their degrees from the world’s best universities. This program also offers specialization for final year students, in the form of Optional Package Courses in Food Engineering and Processing, Food Biotechnology, Food Safety and Quality Assurance, Nutrition and Functional Food, and Entrepreneurship. The aim of this programme is to produce highly skilled human capital and advanced research discoveries in the various disciplines of food science, technology and services through quality education, research and professional services.

At the end of their studies, our students are expected to have the competitive edge in the ever-challenging job market and peruse their knowledge for the development of new products, processes, equipment, and packaging as well as the professional management of plant operations for the production of high quality, functional and nutritious foods.
Career Path

There are many employment opportunities for the Bachelor of Food Science and Technology graduates in both the private and government sectors.

- Food Technologist
- Food Microbiologist
- Food Analyst
- Food Chemist
- Food Quality Control Officer
- Food Safety Officer
- Nutritionist
- Research Officer
- Halal Food Enforcement Officer
- Quality Assurance Executive
- Food Law Practitioner,
- Entrepreneur
- Research and Development Executive
- Production Executive
- Food Marketing Executive

CURRICULUM COMPONENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Courses</td>
<td>21</td>
</tr>
<tr>
<td>Core Courses</td>
<td>82</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>29 - 30</td>
</tr>
<tr>
<td>Co-curriculum</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>132 - 133</td>
</tr>
</tbody>
</table>
WHY SHOULD THE BACHELOR OF FOOD SCIENCE & TECHNOLOGY BE YOUR CHOICE

CURRICULUM HIGHLIGHTS

The curriculum grooms students in the application of scientific principles in food science and technology to meet the demands of consumers and manufacturers for healthy, flavourful and safe foods. Coursework emphasizes the principles of converting raw food materials into safe, wholesome and acceptable food products. Core courses include:

- Food Microbiology
- Food Chemistry
- Food Biochemistry
- Food Hygiene and Sanitation
- Food Analysis and Instrumentation
- Nutritional Changes in Foods
- Fundamentals of Food Engineering
- Unit Operations in Food Processing
- Chemistry and Technology of Plant and Animal Product
- New Food Product Development
- Sensory Evaluation of Food
- Food Quality Management
- Food Law
- Halal Food
- Projects and Seminars
- Industrial Training (6 months)

In their final year, the students are allowed to take additional courses to enhance their knowledge in their field of interest.
Admission Requirements

**LOCAL**

1. **Minimum Qualifications of STPM Candidates**
   Students must pass the general university requirements and the special requirement for the programme which requires at least C+ grade (CGPA: 2.33) in Chemistry

2. **Minimum Qualifications for Matriculation Candidates**
   Students must pass the general university requirements and a special requirement for the programme which requires at least C+ grade (CGPA: 2.33) in Chemistry

3. **Other Accepted Levels of Qualification**
   Students must pass the general university requirements and a special requirement for the programme which requires a Diploma in a relevant field or any other qualifications that are accepted by the UPM Senate.

**INTERNATIONAL**

International candidates must possess an equivalent qualification of the Malaysian High School Certificate (STPM) or a Diploma recognized by the Malaysian Government.

**Equivalent Qualification**
1. A good pass in O-levels/ its equivalent.
2. A pass in the A-levels with at least :- C Grade in three (3) subjects;
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination;
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/art) as specified for each UPM Bachelor programme.

**OR Equivalent Qualification**
1. A pass in the Higher School Certificate (HSC)/its equivalent with at least :- C+ grade in three (3) subjects or 65% in three (3) subjects in the Final Level of Secondary Education
2. A pass in the University Entrance Exam (for countries which seek such requirement for admission into universities);
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/art) as specified for each UPM Bachelor programme.

**OR Equivalent Qualification**
1. A Diploma or its equivalent which is recognized by the Malaysian Government and the University Senate with a CGPA of at least 3.00
2. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/art) as specified for each UPM Bachelor programme.

---

**LOCAL**

<table>
<thead>
<tr>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>RM 2,047.00</td>
<td>RM 16,376.00</td>
</tr>
</tbody>
</table>

**INTERNATIONAL**

<table>
<thead>
<tr>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>USD 2,596.68</td>
<td>USD 20,773.44</td>
</tr>
</tbody>
</table>

* Fees are subject to change
* Fees quoted in USD are based on an exchange rate of 3.129 and are subject to change due to fluctuations of the exchange rate.
Bachelor of Science (Food Service Management)

The Faculty of Food Science & Technology, University Putra Malaysia offers Bachelor of Science (Food Service Management). This programme integrates Food Science, Food Service Management, Culinary Art, Business and Marketing to support food service industry.

The latest facilities and infrastructure, such as Food Service Complex, kitchens (demonstration kitchen, hot kitchen, cold kitchen and pastry kitchen), fine dining restaurant, teaching labs (microbiology, biochemistry, food processing, food engineering, pilot plant and sensory lab), computer lab and wireless internet were built to support teaching modules and students’ on campus training.

Career Path

There are many employment opportunities for the graduates in both the private and government sectors.

- Food and Beverage Managers
- Culinary / Chefs
- Consultants
- Restaurant Managers
- Marketing Managers (specialty Food Service Channel)
- Food Manufacturing Executives
- Menu Planners
- Quality Control Officers
- Quality Assurance Officers
- Researchers
- Other opportunities to work in hospitality, recreation and tourism industry
## CURRICULUM COMPONENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Courses</td>
<td>21</td>
</tr>
<tr>
<td>Core Courses</td>
<td>72</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>33</td>
</tr>
<tr>
<td>Co-curriculum</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
</table>
WHY SHOULD THE BACHELOR OF SCIENCE (FOOD SERVICE MANAGEMENT) BE YOUR CHOICE

CURRICULUM HIGHLIGHTS

The whole programme takes 4 years with total 128 credit hours, which is further divided into 8 semesters with 2 semesters each year. Other than the core courses, the students are also required to undertake several university elective courses from various faculties that would allow him or her to acquire beneficial knowledge and training in ICT, communication, business and other management subjects.

Courses offered:
- Introduction to Food Industry
- Functionality of Food Ingredients
- Nutrition in Foodservice
- Basic Theory of Food Preparation
- Fundamental Laboratory for Food Preparation
- Principles of Food Processing and Preservation
- Microbiology in Foodservice
- Human Resource in Foodservice
- Hygiene and Sanitation in Foodservice
- Information System in Foodservice
- Equipment Layout and Design for Foodservice Facilities
- Marketing and Sales in Foodservice
- Research Methods in Foodservice
- Foodservice Industrial Law
- Asian Cuisine
- Food and Beverage Management
- Institutional Management
- Beverage and Bar Management
- Foodservice Strategic Management
- Contract and Franchise in Foodservice
- Halal Food
- Hotel and Resort Management
- Event, Convention and Exhibition Management
- Nutrition Counseling
- Clinical Nutrition
- Therapeutic Diet
- Clinical Biochemistry
- Basic Entrepreneurship
- Restaurant Services
- Menu Development
- Advanced Food Preparation
- Western Cuisine
- International Business Management
- Interpersonal Communication Skills
- Organizational Behavior
Admission Requirements

**LOCAL**

1. **Minimum Qualifications of STPM Candidates**
   Students must pass the general university requirements and the special requirement for the programme which requires at least C grade (CGPA: 2.00) in Chemistry & Biology

2. **Minimum Qualifications for Matriculation Candidates**
   Students must pass the general university requirements and a special requirement for the programme which requires at least C grade (CGPA: 2.00) in Chemistry & Biology

3. **Other Accepted Levels of Qualification**
   Students must pass the general university requirements and a special requirement for the programme which requires a Diploma in a relevant field or any other qualifications that are accepted by the UPM Senate.

**INTERNATIONAL**

International candidates must possess an equivalent qualification of the Malaysian High School Certificate (STPM) or a Diploma recognized by the Malaysian Government.

**Equivalent Qualification**

1. A good pass in O-levels/its equivalent.
2. A pass in the A-levels with at least :- C Grade in three (3) subjects;
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination;
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

OR **Equivalent Qualification**

1. A pass in the Higher School Certificate (HSC)/its equivalent with at least :- C+ grade in three (3) subjects or 65% in three (3) subjects in the Final Level of Secondary Education
2. A pass in the University Entrance Exam (for countries which seek such requirement for admission into universities);
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

OR **Equivalent Qualification**

1. A Diploma or its equivalent which is recognized by the Malaysian Government and the University Senate with a CGPA of at least 3.00
2. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

---

**LOCAL**

<table>
<thead>
<tr>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>RM 2,047.00</td>
<td>RM 16,376.00</td>
</tr>
</tbody>
</table>

**INTERNATIONAL**

<table>
<thead>
<tr>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>USD 2,596.68</td>
<td>USD 20,773.44</td>
</tr>
</tbody>
</table>

* Fees are subject to change
* Fees quoted in USD are based on an exchange rate of 3.129 and are subject to change due to fluctuations of the exchange rate.
Bachelor of Science (Food Studies)

Food Management Option

The Faculty of Food Science and Technology, Universiti Putra Malaysia offers Bachelor of Science (Food Studies) with specialization in Food Management. This program integrates food science and technology, food management, business and marketing to support the food industry in Malaysia.

Food Marketing Option

The Faculty of Food Science and Technology, Universiti Putra Malaysia offers Bachelor of Science (Food Studies) with specialization in Food Service Administration. This program integrates food science, food service management, culinary art, business and marketing to support the food service industry. The latest infrastructure, the Food Service Complex was built to support the teaching modules and students’ on-campus training. It was designed as a modern industrial kitchen equipped with a mock restaurant, training kitchens, a bakery unit and an experimental food laboratory.
Career Path

Food Management Option

There are many employment opportunities for the graduates in both the private and government sectors.

- Food Quality Officer
- Human Resource Officer
- Food Law Enforcement Officer
- Food Production Executive
- Research and Development Executive

Executive
- Food Marketing Executive
- Technical Sales Executive
- Promotion Executive
- Human Resource Executive

- Operation Management Executive
- Entrepreneur

Food Marketing Option

Graduates of this programme normally employed in government agencies and numerous food service establishments such as restaurants, fast food outlets, hotels, hospitals, catering, in-flight catering and military among others at operational, supervisory, and managerial positions or involved in R&D in food service industry.

- Human Resource Officer
- Research and Development Executive
- Marketing Officer etc.

- Food Marketing Executive
- Technical Sales Executive
- Promotion Executive

- Human Resource Executive
- Entrepreneur etc.

CURRICULUM COMPONENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Courses</td>
<td>21</td>
</tr>
<tr>
<td>Core Courses</td>
<td>74</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>32</td>
</tr>
<tr>
<td>Co-curriculum</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>129</strong></td>
</tr>
</tbody>
</table>

[Image of a greenhouse or plant nursery]
WHY SHOULD THE BACHELOR OF SCIENCE (FOOD STUDIES) BE YOUR CHOICE

Food Management Option

Students are required to complete a minimum of 134 credits within 8 semesters (4 years). The program offers students theoretical and practical experiences in the laboratory and food service industry. The work immersion component of the program provides resume-building experience for the students.

Core courses include:
- Cost and Management Accounting
- Financial Management
- Food Industry Operations Management
- Information System in Food Industry
- Marketing and Sales in Food Industry
- Strategic Management in Food Industry
- Current Issue in Food Business
- Unit Operations in Food Processing I
- Unit Operation in Food Processing II
- Halal Food
- Food Process and Plant Design
- Food Industry Waste Engineering
- Promotion Management
- Agribusiness Project Planning and Management
- Agribisnes Enterpreneurship

Food Marketing Option

Students are required to complete a minimum of 135 credits within 8 semesters (4 years). The program offers students theoretical and practical experiences in the laboratory and industry. The work immersion component of the program provides resume-building experience for the students.

Core courses include:
- Marketing and Sales in Food Industry
- Unit Operations in Food Processing I
- Operasi Unit Pemrosesan Makanan II
- Halal Food
- Industrial Food Microbiology
- Sensory Evaluation of Food
- Principles of Marketing
- Consumer Behavior
- Services Marketing
- Marketing Strategy & Management
- Direct Marketing
- Marketing Research
- International Marketing
- Promotion Management

In addition to the core courses, students are also required to undertake several university elective courses from various faculties that would allow him/her to acquire beneficial knowledge and training in ICT, communication, business, and other social science subjects.
Admission Requirements

1. **Minimum Qualifications of STPM Candidates**
   Students must pass the general university requirements and the special requirement for the programme which requires at least C grade (CGPA: 2.00) in Chemistry & Biology.

2. **Minimum Qualifications for Matriculation Candidates**
   Students must pass the general university requirements and a special requirement for the programme which requires at least C grade (CGPA: 2.00) in Chemistry & Biology.

3. **Other Accepted Levels of Qualification**
   Students must pass the general university requirements and a special requirement for the programme which requires a Diploma in a relevant field or any other qualifications that are accepted by the UPM Senate.

International candidates must possess an equivalent qualification of the Malaysian High School Certificate (STPM) or a Diploma recognized by the Malaysian Government.

**Equivalent Qualification**
1. A good pass in O-levels/its equivalent.
2. A pass in the A-levels with at least C Grade in three (3) subjects;
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination;
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

OR **Equivalent Qualification**
1. A pass in the Higher School Certificate (HSC)/its equivalent with at least C+ grade in three (3) subjects or 65% in three (3) subjects in the Final Level of Secondary Education
2. A pass in the University Entrance Exam (for countries which seek such requirement for admission into universities);
3. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

OR **Equivalent Qualification**
1. A Diploma or its equivalent which is recognized by the Malaysian Government and the University Senate with a CGPA of at least 3.00
2. A Band 3 in the Malaysian University English Test (MUET) or a TOEFL score of at least 550 or a score of 6 in the IELTS examination
   AND has fulfilled special requirements for the program i.e. attaining the required grades in (sciences/arts) as specified for each UPM Bachelor programme.

<table>
<thead>
<tr>
<th>LOCAL</th>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>RM 2,047.00</td>
<td>RM 16,376.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERNATIONAL</th>
<th>Programme Duration</th>
<th>Fees per semester</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years (8 semesters)</td>
<td>USD 2,596.68</td>
<td>USD 20,773.44</td>
<td></td>
</tr>
</tbody>
</table>

* Fees are subject to change
* Fees quoted in USD are based on an exchange rate of 3.129 and are subject to change due to fluctuations of the exchange rate.
Knowing MALAYSIA

Malaysia is a bustling melting pot of races and religions where the Malays, Indians, Chinese and many other ethnic groups live together in peace and harmony. The multiculturalism that is unique to Malaysia has made Malaysia home to hundreds of colourful festivals. Malaysians love celebrating and socialising, and are very warm and friendly in nature. In Malaysia, a wonderful balance between modernisation and traditions can be clearly observed, even in bustling cities like Kuala Lumpur. The modern Malaysia’s famous towering skyscrapers are beautifully contrasted with traditional wooden houses built on stilts found in villages. In essence, the people of Malaysia are strongly rooted in their individual cultures.

Malaysia has a population of approximately 27 million. The country experiences tropical weather year-round. Temperatures range from 21°C (70°F) to 32°C (90°F).

Malay Language (Bahasa Melayu) is the national language in use, but English is widely spoken. The ethnic groups also converse in their various languages and dialects.
TO APPLY FOR THIS PROGRAMME:

1. Go to http://www.upm.edu.my/
2. Click on PROSPECTIVE STUDENTS
3. Click Application in the STUDY PROGRAMS link

For more information, please contact:

Dean
Tel: +603 8946 8367  Fax: +603 8948 5970
Email: dean@food.upm.edu.my

Deputy Dean (Academic and Students Affairs)
Tel: +603 8946 8371  Fax: +603 8942 3552
Email: dacademic@food.upm.edu.my

Faculty of Food Science and Technology
University Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan, Malaysia