TAYLOR’S UNIVERSITY
Wisdom · Integrity · Excellence

PHARMACY
Taylor’s University

Established since 1969, we are a world-class university which has provided our students with a global-standard education experience through our well-equipped campus, up-to-date facilities, strong industry linkages and partnerships with leading universities worldwide.

Students can enrol in foundation, diploma, degree, postgraduate and professional programmes encompassing various fields, such as American Degree Transfer Program, Architecture, Biomedical Science, Biotechnology, Business, Communication, Computing & IT, Design, Education, Engineering, Food Science with Nutrition, Hospitality, Tourism & Culinary Arts, Law, Medicine, Pharmacy, Psychology, and Quantity Surveying.

With an alumni of over 70,000 graduates, we continue to play a strong role in developing Malaysia’s human resource capital. Our strong network of alumni have become leaders in their respective fields throughout the country, and around the world.
Awards

QS Stars Rated Excellence & University Ranking By Region

Putra Brand Gold Awards
Performance Rating by Ministry of Education
Reader’s Digest Trusted Brand Gold Awards

2016
- Top 200 universities in Asia in the QS Asia Ranking
- Awarded 5-Star rating in five (5) categories of the QS Stars Rating
- Gold Award in the ‘Education & Learning’ category for the 7th consecutive year in Putra Brand Awards
- Gold Award in the ‘Private University/College’ category for the 6th consecutive year in the annual Reader’s Digest Trusted Brands Award

2015
- Top 250 universities in Asia in the QS Asia Ranking
- Awarded 5-Star rating in four (4) categories of the QS Stars Rating
- Gold Award in the ‘Education & Learning’ category of the Putra Brand Awards
- Gold Award in the ‘Private University/College’ category of the Reader’s Digest Trusted Brands Award
- Became the first university outside the United States to be accepted into the Grand Challenge Scholars Program, championed by National Academy of Engineering (NAE)

2014
- ‘Tier 5: Excellent’ rating in the Malaysian Ministry of Higher Education’s Rating System (SETARA) 2013
- Gold Award in the ‘Education & Learning’ category of the Putra Brand Awards
- Gold Award in the ‘Private University/College’ category of the Reader’s Digest Trusted Brands Award
- Winner in the ‘Most Resourceful Career Centre Private University’ category of the Graduate Recruitment Awards 2014
Vice Chancellor and President’s Message

Taylor’s University is a world-class international university which aims to provide its students with outstanding teaching and cutting edge learning facilities.

Our objective is to produce successful graduates who are first choice for leading employers. We also help our students to graduate with the ambition and entrepreneurial skills to establish their own successful businesses. Work experience gained through internship is an integral part of many of our programmes.

Taylor’s University has a strong international outlook based on its international faculty and students which come from all parts of the world. The international community at Taylor’s is something the University is proud of and intends to continue to develop in order to ensure that our graduates are prepared for the modern international workplace.

Research and enterprise are rising ever higher on the Taylor’s University agenda. Developing international-class research and expertise will further raise the reputation and standing of the University and the value of the degrees held by new graduates and alumni.

If you are thinking of becoming a student at Taylor’s University, my colleagues look forward to answering any question you may have and we look forward to your visit to our Lakeside Campus in Subang Jaya.

Sincerely,
Professor Michael Driscoll
Vice Chancellor and President
of Taylor’s University
Research & Innovation

Taylor’s University has a firm footing in research and innovation as we believe these efforts can contribute towards knowledge building as well as assist in the development of the industry and society at large. As a University centred on research and innovation initiatives, we adopt a progressive outlook, embedding research components throughout our programmes and encouraging them at various levels in each faculty. Our students and faculty members engage extensively in “applied research”, which enhances the body of knowledge and creates a direct impact on real world applications. All academic staff appointed at the degree level actively undertake research within the institution or in collaboration with industries or universities, either foreign or local. This research work shapes the creation and dissemination of new knowledge, feeding into the practical application of that knowledge, and ultimately informs and enhances teaching at Taylor’s.
Teaching and Learning Support

TED complements the work of academic staff to create excellence in teaching through practice, development, and innovation. We offer workshops and seminars that address a range of timely topics associated with teaching, learning and technology in higher education to enhance teaching capability and learning engagement.

The name ‘academy’ reflects our core purpose as a unit which primarily promotes ‘learning how to teach with technology’. Hence, eLA’s task is to help our academic staff effectively and meaningfully implement the use of technology in transforming the learning journey of the students, and hence enable them to learn in a collaborative, self-directed and personalized manner, anytime and anywhere.

The Student Success Centre (SSC) assists students as they adjust to university studies. SSC offers intervention for students via a blend of workshops, personalised 1-2-1 consultations and peer support services to provide learning opportunities throughout the students’ journey towards academic success.

SAC spearheads Taylor’s University’s commitment to holistic education by providing a platform for students to obtain formal recognition for their extracurricular involvement through the 2nd Transcript and the SHINE Award. Besides running workshops to equip students with soft skills that will prepare them for the workplace, SAC also creates opportunities for students to engage in experiential activities outside of the classroom.
Keeping Healthcare at its Forefront

Like most progressive fields of studies, pharmacy is evolving at an exponential pace to keep up with global healthcare needs.

Taylor’s School of Pharmacy (SOP) plays a unique role in the community to raise the standard of pharmacy education. In doing so, we produce pharmacists who are knowledgeable, independent and focused on the improvement of the profession as well as the community as a whole.

Students who are keen on making the study of Pharmacy the foundation for their chosen career path will be exposed to the aspects of drug design, evaluation, production and use of medication, based on fields of pharmaceutical and medical sciences.

In addition, we focus on cultivating pharmaceutical research, training, educating and transforming our students to create pioneering scientific solutions.

The School continues to establish strong collaborations with leading pharmaceutical companies, placing our students in an advantageous position to face their future career challenges.
Why Pharmacy at Taylor’s?

A FOUNDATION RECOGNISED BY MANY

Our Foundation in Science programme is internationally recognised by leading universities in Australia and the UK.

RESEARCH-FOCUSED CURRICULUM

An emphasis on research allows the school to anticipate issues that affect the industry. Students are encouraged to adopt the scientific approach and constantly question general truths.

COMPREHENSIVE PLACEMENT

Active industry linkages and compulsory training and attachment provide a multifaceted view of the various roles a pharmacist plays in the healthcare sector.

ALL-ROUNDED LEARNING EXPERIENCE

We build experiences that extend beyond the classroom via team building, conference participation and field visits. These initiatives help students widen their perspective through the practical application of their theory based knowledge.
Start with a foundation recognised by many

Our Foundation in Science (FIS) equips you with knowledge and skills necessary to pursue science through projects, student-led discussions, community service trips, networking with researchers, and competitions.

FIS students will have first priority in progressing to degrees in Taylor’s University. Furthermore, our FIS programme is internationally recognised in Australia and the UK.

AUSTRALIA
The University of Melbourne
The University of South Australia

UK
University of Birmingham
University of the West of England

Find the full list of universities at university.taylors.edu.my/biosciences/overseas-transfer-options

*Admission is subject to the entry requirements established by the respective universities.
Take on science projects of your own

Providing a holistic approach to science, the Integrated Science Project (ISP) emphasises hands-on learning experiences, enabling you to apply your knowledge effectively. You’ll be taught via individual experiments and projects such as:

- Biodegradable plastics
- Filtering water with fruit peels
- Developing an eco-friendly way to dissolve Styrofoam
- Inventing eco-friendly pens with soy

This experience brings out the inner scientist in you to pursue a future in the dynamic field of science.
Comprehensive Placement

The School has integrated an effective industrial attachment programme whereby students undergo compulsory training programmes at hospitals, community pharmacies and pharmaceutical companies.

Learn the various roles of a pharmacist via compulsory training at:

**HOSPITAL PHARMACIES**

Procedures and operations in out- and in-patient pharmacies, clinical pharmacies, therapeutic drug monitoring, total parenteral nutrition, oncology pharmacy, store pharmacy and drug information centres.

**COMMUNITY PHARMACIES**

Business operations, sales, marketing, stock control, personnel training, consultation and public health awareness.

**INDUSTRIAL PHARMACIES**

Manufacturing, quality control processes, clinical trials, medical info, production, R&D and product registration.
PISA Prepares You for Your Career in Pharmacy

80% OF EMPLOYERS WANT GRADUATES WHO HAVE COMPLETED INTERNSHIPS*

* Source: Harris Interactive Survey, 2013

So why not equip yourself with exactly what the industry is looking for?

Taylor's Bachelor of Pharmacy (Hons) is complemented with a Pharmaceutical Industry Student Adoption (PISA) programme, giving students the opportunity to work with leading healthcare providers. These internships provide hands-on training, industry mentorship, networking opportunities and more, grooming students into more holistic and future-ready graduates who are highly sought after by the industry.

"Pfizer Malaysia has the vision to become a talent hub within the region. With the Taylor’s Pharmaceutical Industry Student Adoption (PISA) programme, we’re able to identify, train and develop future leaders for healthcare."

John McIndoe
Country Manager,
Pfizer Malaysia

Work with our industry partners:

The partnership between Novartis and Taylor's allows students to learn more about the pharmaceutical industry with direct hands-on experience. This opens up opportunities for them to pursue a fulfilling career that has an impact on both society and patients' lives.

Michaela Dinboeck
President &
Managing Director
Novartis Corporation,
Malaysia

Dr. Ait-Allah Mejri
General Manager
Roche, Malaysia

Partnering with Taylor’s University PISA programme provides opportunities for selected students to learn about the industry while we get support through their contributions and are able to identify future employees.

"Abbott
A Promise for Life"

"Bayer"

"BLACKMORES"

"Boehringer Ingelheim"

"Johnson & Johnson
SOUTHEAST ASIA"

"MSD"

"Novartis"

"Pfizer"

"Roche"
Research-Focused Curriculum

With the study of pharmacy evolving at an exponential rate, the School of Pharmacy places significant emphasis on research to keep up with global healthcare developments.

Our patient-centric programme grooms students to become independent learners and equips them with the ability to explore knowledge, advance research in the field, as well as develop and use medication for the betterment of patients.

Students are supported by our highly experienced academic faculty with over 85% of them are PhD holders in various specialisations within pharmacy. Our lecturers are actively engaged in research studies, regularly presenting their findings on a global platform as well as being on the editorial board of reputed pharmaceutical journals.

In a continuous effort to uplift our research capabilities, we seek to establish collaborative partnerships with government and private organisations to advance the pursuit of knowledge in the field of pharmacy and contribute to the overall development of the country’s healthcare practice.
Key Research Areas

The School of Pharmacy’s research encompasses five major areas in which students carry out guided activities:

— **Pharmacy Practice & Clinical Pharmacy:**
  - Social and administrative pharmacy
  - Legislative and regulatory pharmacy
  - Pharmacoeconomics
  - Pharmacoinformatics
  - Quality of life studies
  - Pharmacy education
  - Adverse drug reaction research
  - Disease burden studies
  - Bioequivalence studies

— **Pharmaceutical Technology:**
  - Oral controlled release drug delivery systems
  - Fast dissolving drug delivery systems
  - Preformulation studies

— **Pharmacology:**
  - Cardiovascular and renal pharmacology/physiology
  - Antihypertensive and hypoglycaemic and toxicological effects of herbal extracts
  - Behavioural pharmacology

— **Pharmaceutical Chemistry:**
  - Medicinal chemistry (in silico design and synthesis of SCMs) and natural products isolation and chemistry
  - Analytical method development and validation
  - Computational medicinal chemistry

— **Phytochemistry:**
  - Extraction of herbal drugs
  - Isolation and characterisation of herbal constituents
  - Design and development of herbal formulations and standardisation of herbal products

Our patient-centric programme grooms students to become independent learners and equips them with the ability to explore knowledge, advance research in the field, as well as develop and use medication for the betterment of patients. Students are supported by our highly experienced academic faculty with over 85% of them are PhD holders in various specialisations within pharmacy. Our lecturers are actively engaged in research studies, regularly presenting their findings on a global platform as well as being on the editorial board of reputed pharmaceutical journals. In a continuous effort to uplift our research capabilities, we seek to establish collaborative partnerships with government and private organisations to advance the pursuit of knowledge in the field of pharmacy and contribute to the overall development of the country’s healthcare practice.
Facilities

Our customised labs and facilities are independently audited by both the Malaysian and UK Boards of Pharmacy, ensuring that industry standards are met.

Aseptic Suite

This sterile preparation suite teaches students the theories and skills related to the specialised dispensing of injectables and other sterile medicines, mimicking those found in hospitals and the pharmaceutical industry.

Pharmaceutics Lab

This lab is specifically created to teach students procedures and methods for pharmaceutical product development, small to medium scale manufacturing and product quality control, and stability testing, utilising modern machinery and equipment such as:

- 10-station rotary tablet machine
- High-intensity mixers, precision blenders and coating equipment to manufacture a wide variety of dosage forms
- Quality control apparatus, namely disintegration tester, friability tester, hardness tester, tapped density tester, and dissolution tester
- Perkin Elmer Fourier Transform Infrared
- Spectrophotometer
- UV-Visible Spectrophotometers
- Karl Fisher apparatus
- Other general instruments that aid in measuring moisture, conductivity, surface and interfacial tension and thermal effects
- Franz Diffusion Cell to study diffusion and evaluation of topical dosage form

Pharmaceutical Chemistry & Analysis Lab

This lab is used to provide routine chemical and biological sample analysis; training to students and PhD associates to run the self-service equipment; and opportunities for collaborative research in chemical analysis. It is also utilised for analysing gases, liquids and solids in pure or complex mixture forms.
Dispensary Facility
This mock dispensary is designed and fitted to the specification of an active community pharmacy, used for all aspects of practice, including counselling patients and health education. This facility is also part of a Clinical Skills Suite, with a mock hospital ward, where students learn clinical skills relating to hospital and community practice, with over 20 computers for labelling medicines and maintaining patient medication records.

Biological Science Lab
This lab is equipped with modern equipment for the study of physiology, microbiology, biochemistry, pharmacology and genetics such as:

- Centrifuges
- Real Time PCR machine
- Laminar air flow
- Biological safety cabinet
- 2-D electrophoresis system
- Fluorescence motorised inverted microscope
All-Rounded Learning Experience

There is one goal when it comes to our well-rounded approach to education – to immerse students in hands-on learning outside the classroom where experience is at the heart of the learning process.

Student Achievements

Taylor's School of Pharmacy winning the 2016 National Pharmacy Quiz.

Field Trips

Providing students with insight on how drugs are manufactured, packed and supplied to the market.

Regular visits to Hospis Malaysia increase awareness of the pharmacist’s role in palliative care. Students learn from real-life cases and gain appreciation for medication and symptom management.

Our Pharmacy students emerged as 2nd Runner Up in the 2016 National Clinical Pharmacy Challenge.

Students gain exposure and insight to the field of pharmacy through the annual event organised by the Malaysian Pharmacy Students Association.

Students mingled and networked with fellow pharmacy undergraduates from different institutions, amid a healthy and active setting.
Through these activities, we cultivate self-confidence, a strong sense of teamwork and leadership capabilities amongst students.

Taylor’s Pharmacy Students
Goes Global

Experiencing different cultures through our student exchange programme with partner universities in Australia, Thailand and India.

Students learn about community pharmacy through internship placements in Australia.

Taylor’s University Pharmacy
Students’ Society (TUPSS)

Formed by the students of the School of Pharmacy (SOP), the Society’s main objective is to bring together pharmacy students from across the nation and world.

Our event highlights include:
1. Annual Pharmacy Gala Night
2. National Gathering of Pharmacy Students (NoGAPS)
3. National Pharmacy Sports Carnival

The Extra Mile Programme
(TEMP)

We organised a Public Health Awareness Campaign, held in collaboration with the Ministry of Health and our PISA partner, Pfizer Malaysia and won the 2016 MyPSA Best Public Health Campaign Award.

A community outreach initiative allowing students to reach out to families who are less fortunate.

12th Malaysian Pharmaceutical Society Pharmacy Scientific Conference

We are the first private university to organise this conference, held at our campus and attracting over 400 participants worldwide.
Testimonials

Jessica Ann Gregory  
Bachelor of Pharmacy (Hons)  

During the World Food Day campaign, I had the opportunity to collaborate with students from various programmes, to help the poor. I learned the importance of teamwork, and with the right strategy, our team managed to successfully complete the tasks we were assigned with.

Wong Shee Mei  
Bachelor of Pharmacy (Hons)  

"I would highly recommend the Pharmaceutical Industry Student Adoption (PISA) programme to my peers as the experience gained is invaluable and it provides students with an extra advantage over the others."

Lionel Stephan Liew Teck Jin  
Bachelor of Pharmacy (Hons)  

One of my best experiences beyond the classroom was our trip to Kotra Pharma, Melaka. It gave me better insight on drug formulation, how drugs are made, and how their quality is maintained throughout the production process. It was an eye-opener on the diverse roles of a pharmacist."
Reference List

- Association of Private Hospitals of Malaysia
  www.hospitals-malaysia.org

- Malaysian Community Pharmacists Association
  www.mcp.org.my

- Malaysian Pharmaceutical Society
  www.mps.org.my

- Malaysian Organisation of Pharmaceutical Industries
  www.mopi.org.my

- Ministry of Health Malaysia
  www.moh.gov.my

- MOH Pharmaceutical Services Division
  www.pharmacy.gov.my

- MPS Young Pharmacist Chapter
  www.youngmps.org

- National Pharmaceutical Control Bureau
  www.portal.bpfk.gov.my

- Pharmaceutical Association of Malaysia
  www.phama.org.my
This publication contains information, which is current as of January 2017. Changes in circumstances after this date may impact upon the accuracy or timeliness of the information. Taylor's University does its best to ensure that the information contained herein is accurate, but reserves the right to change any information described in this prospectus without notice. Readers are responsible for verifying information that pertains to them by contacting the university.
PHARMACY

Foundation in Science

Bachelor of Pharmacy (Hons)
EDUCATION PATHWAY

SPM / O Level / Equivalent

- Foundation in Science
  - 1 Year

- STPM / UEC / A Levels / SAM / SACE / CPU / IB / Matriculation / Equivalent
  - 1-2 Years

Bachelor of Pharmacy (Hons)
- 4 Years
- Awarded by Taylor’s University
  - Include Hospital, Industry and Community Pharmacy Attachments

- Master of Philosophy (Pharmacy) / Master of Philosophy (Pharmaceutical Sciences)
  - Min. 2 Years

- Doctor of Philosophy (Pharmaceutical Sciences)
  - Min. 3 Years

- Master of Philosophy (Pharmacy) / Master of Philosophy (Pharmaceutical Sciences)
  - *Includes PRP (Limited seats only)
  - Min. 2 years

- Registered Pharmacist

- Provisionally Registered Pharmacist (PRP) Training
  - 1 Year

- Registered Pharmacist (Compulsory Service under MOH)
  - 1 Year

- Doctor of Philosophy (Pharmaceutical Sciences)
  - Min. 3 Years

Note:
Taylor’s University, through the School of Pharmacy, is the first private university to be included in the list of premises for the training of provisionally registered pharmacists that has been recognised by the Pharmacy Board of Malaysia.

Current information about registration requirements can be found at the website of the Pharmaceutical Services Division of the Ministry of Health – http://www.pharmacy.gov.my
OVERSEAS TRANSFER OPTIONS

AUSTRALIA

UNIVERSITY OF SOUTH AUSTRALIA (UniSA)

Students studying the Bachelor of Pharmacy (Hons) at Taylor’s University have the option to transfer their credits to the University of South Australia at the end of their second year (minimum requirement cGPA 2.85), allowing them the opportunity to complete their 3rd and 4th year at the University of South Australia in Adelaide. Students will then be awarded their Bachelor of Pharmacy degree by the University of South Australia, allowing them to be registered and practice as pharmacists in Australia.
FULL ACCREDITATION

FOUNDATION IN SCIENCE
KPT/JPS(R/010/3/0085)(A7920)06/22

INTAKE: JANUARY, MARCH & AUGUST

The programme exposes students to a dynamic environment, which encourages two-way interaction between students and lecturers. Learning also takes place beyond the classroom via community service trips, interaction with researchers, participation in competitions, and many more.

Programme Structure:

<table>
<thead>
<tr>
<th>Year 1</th>
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<tbody>
<tr>
<td><strong>Core Modules</strong></td>
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<tr>
<td>• Cell Biology</td>
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<tr>
<td>• Chemistry I</td>
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<tr>
<td>• Chemistry II</td>
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<tr>
<td>• English I</td>
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<td>• English II</td>
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<td>• Human Biology</td>
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<td>• Mathematics</td>
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<tr>
<td>• Quantitative Techniques</td>
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<tr>
<td>• Social Psychology</td>
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<tr>
<td><strong>Electives</strong></td>
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<tr>
<td>Choose ONE (1):</td>
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<tr>
<td>• Physics I</td>
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<tr>
<td>• Creative Thinking Skills</td>
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</tbody>
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50 Credit Hours
BACHELOR OF PHARMACY (HONS)

KPT/JPS (R/727/6/0071) (MQA/FA4664) 10/20

INTAKE: AUGUST

This programme equips students with the knowledge of the pharmaceutical sciences, focusing on four main areas: Pharmacology, Medicinal Chemistry, Drug Delivery and Pharmacy Practice.

### Primary Core

**Year 1**
- Introduction to Pharmacy
- Human Anatomy and Physiology
- Principles of Life Sciences
- Pharmaceutical Compounding and Dispensing
- Pharmacology I
- Pharmaceutical Organic Chemistry
- Physical Pharmaceutics

**Year 2**
- Community Pharmacy Practice I
- Pharmacology II
- Principles of Pharmaceutical Chemistry
- Pharmaceutical Formulation and Development I
- Biostatistics and Quality Use of Medicines
- Community Pharmacy Practice II
- Pharmacology III
- Pharmaceutical Analysis

**Year 3**
- Hospital Pharmacy Practice
- Law, Ethics and Practice
- Pharmaceutical Formulation and Development II
- Drug Design and Biotechnology
- Applied Therapeutics I
- Professional Attachment

**Year 4**
- Applied Therapeutics II
- Applied Therapeutics III
- Research Project

- **100 Credit Hours**

### University Core

- Community Service Initiative
- Hubungan Etnik / Malaysian Studies 3
- Life Skills for Success & Well-Being
- Millennials in Malaysia: Team Dynamics and Relationship Management
- Tamadun Islam dan Tamadun Asia / Bahasa Melayu Komunikasi 2

- **12 Credit Hours**

### Complementary Studies

**Choose ONE (1) of the below packages:**

**Extension**
- Advanced Pharmaceutical Industrial Practice (5 modules)

**Choose any TWO (2) Free Electives* offered by Taylor's University. Refer to the Complementary Study Guide for the list of Free Electives.**

**or**

**Minor**

**Recommended Packages:**
- Psychology
- Law
- Biotechnology
- Nutrition
- Accounting
- Entrepreneurship
- Industrial Design and Human Resource Management
- Web Technology
- Management
- Marketing

**Choose any Minor package* (5 modules) offered by Taylor's University. Refer to the Complementary Study Guide for the list of Minor packages.**

**and**

**Choose any TWO (2) Free Electives* offered by Taylor's University. Refer to the Complementary Study Guide for the list of Free Electives.**

**or**

**Free Electives**

**Choose any SEVEN (7) Free Electives* offered by Taylor's University. Refer to the Complementary Study Guide for the list of Free Electives.**

*Subject to availability
*Meet min. module pre & co-requisite

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**Note:**
Primary Core + University Core + Extension = Min. 4 Years (140 Credit Hours)
Primary Core + University Core + Minor = Min. 4 Years (140 Credit Hours)
Primary Core + University Core + Free Electives = Min. 4 Years (140 Credit Hours)

*Students are requested to take Bahasa Kebangsaan A should they not obtain a Credit for Bahasa Malaysia in SPM.