Veterinary Eligibility and Education

Veterinary Education in Malaysia

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The Faculty of Veterinary Medicine (FVM) in Malaysia was first established in 1972 at Universiti Putra Malaysia (UPM) with the first student intakes to enroll Doctor of Veterinary Medicine (DVM) programme in 1973.

The veterinary services were previously served by mainly veterinary graduates from Australia, Canada, India, Pakistan, UK and USA.

In 2009, FVM, Universiti Malaysia Kelantan (UMK) was established as the second veterinary school in the country.

Both DVM programme in UPM and UMK are accredited by Malaysia Veterinary Council (MVC).

The graduates of the Faculty are almost assured of job placements upon graduation.
A 5 years programme with English as the medium of instructions and follows semester system

The curriculum is based on British, Canadian, Australian and American system with some component of animal production (10-15%) and critically reviewed once in every 5 years

It emphasis on learning outcomes based on teaching and learning taxonomy: cognitive, psychomotor, affective and social domains, and soft skill elements

It in-line with the AVBC, RCVS, and OIE requirements

Curriculum revision is done every 5 years with feedback from industry, employer surveys, forums with industry, external assessors and examiners and required approval by various committees such as Malaysia Veterinary Council (MVC), Advisory Committee, Senate and Ministry of Education
Veterinary Curriculum

- The approach in teaching and learning focus on student centered learning (SCL) such as problem based learning (PBL), case study, modular approach, project oriented problem based learning (PoPBL), computer assisted learning (CAL) and independent project.

- Assessment is by objectives-based evaluation (OBE): that centers on the specification of objectives and the measurement of outcomes, and produce a day-one competency graduate.

- **Post graduate training** such as Master and PhD programmes, internship and residency programmes, specialists (Malaysian College of Veterinary Specialists and others) as well as lifelong learning and continuous professional development (CPD) are encouraged to the graduate to enhance their competency and meeting the profession challenges globally.

- Meeting a CPD point is a requirement for Annual Practicing Certificate (APC) renewal annually.
Admission

- The admission of student in Malaysian veterinary schools is very competitive and only highly qualified candidate with good academic achievements and high interest in the programme such as first choice for the programme will be successfully enrolled into the programme.

- The faculty only admits students with a minimum CGPA of 3.50 (maximum of 4.00).

- The faculty has introduced interview as part of the admission process.

- Criteria that are evaluated during the interview:
  - Personal traits and communication skills
  - Passion and interest in veterinary medicine
  - Ethical and professional qualities
  - Leadership, managerial and interpersonal skills
  - Related Experiences
  - General and supplementary questions

- Currently, only about 110 and 40 places per year are available for new national student intakes in Faculty of Veterinary Medicine UPM and UMK, respectively, including about 5-10% full-fee international or overseas students.
Admission Requirements

- The minimum admission requirements are as follows:

  1. **Matriculation/Foundation Studies**
     - Cumulative Grade Point Average (CGPA) of ≥3.5, at least Grade B+ in Biology and Grade B in Chemistry or at least Grade B+ in Chemistry and Grade B in Biology.

  2. **Malaysian Higher School Certificate or its equivalent for non-Malaysian**
     - CGPA of ≥3.5, at least Grade B+ in Biology and Grade B in Chemistry or at least Grade B+ in Chemistry and Grade B in Biology, a pass in the practical exam as required in the subjects of Biology and Chemistry.

  3. **Diploma in a related field**
     - CGPA requirement based on work experience; No experience, ≥3.5; 3-4 years of experience, ≥3.0; 5-9 years of experience ≥2.7; 10 years of experience ≥2.5.

- **English language requirement**
  - For local students, at least Band 3 in the Malaysian University English Test (MUET). Non-Malaysians of non-English speaking background require a minimum **IELTS score of band 6.0 or TOEFL Paper Based score of 550** or 218 (Computer Based) or 79-80 (Internet Based).
Quality Management System

- In July 2000, the Faculty was awarded the comprehensive MS ISO 9001:1994 certification that encompasses undergraduate and graduate studies, research, administration, continuing education, and professional and veterinary hospital services.

- In December 2011, UPM was awarded the comprehensive MS ISO 9001:2008 certification.

- In April 2010, UPM awarded Certificate of Self-Accreditation Status from Malaysia Qualifications Agency (MQA).

- In 2008, the Faculty was accredited with MS ISO/IEC 17025:2005 for veterinary laboratory services.

- In September 2014, University Agricultural Park (TPU) was awarded Malaysia Good Agriculture Practice (MyGAP).

- In 2016, NCO MyOHUN was awarded the ISO 9001:2008 certification.

- In September 2017, UPM was awarded the comprehensive QMS ISO 9001:2015 certification – (i.e. Strategic vision & Risk management).
In 2010 the faculty relocated to the new Veterinary Complex at the South campus of UPM within the federal administrative districts of Putrajaya and Cyberjaya that allows easy access to the public

The Complex comprising the administrative, academic and laboratory, necropsy and veterinary hospital blocks

Formal teaching is conducted mainly in this Complex

Adequate space and facilities for effective activities and archive excellence in the core functions

High quality of veterinary education and graduates in the country and globally

<table>
<thead>
<tr>
<th>BLOCKS</th>
<th>AREAS (M²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMN. Acad. &amp; Labs</td>
<td>17,506</td>
</tr>
<tr>
<td>University Vet. Hospital</td>
<td>11,233</td>
</tr>
<tr>
<td>Necropsy</td>
<td>1,594</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30,333</td>
</tr>
</tbody>
</table>
Extramural Studies / Industrial Training

- Conducted during the end of semester 1 (0-5 weeks) and end of semester 2 (1-6 weeks)
- Government and non-government farms, clinics and laboratories

Clinical Training (During Semester)

- Main facilities at UVH and TPU, UPM
- Clinical cases at Foster Farms, Client farms & stables, Animal shelter and Zoo
University Veterinary Hospital

**COMPANION ANIMALS**
- Cats: 57%
- Dogs: 40%
- Other Pets: 3%

**FARM ANIMALS & EQUINE**
- Ruminants: 31.8%
- Equine: 1.7%
- Avian: 19.5%
- Aquatic: 0.1%
- Others: 46.9%

**Quick win opportunities**
- Open Saturday and Sunday
- Expanding foster farms
- Revision of fee schedule for services
- Revision of funding for student clinical practices from University
- Expending clinical and laboratory services for research activities
- Competence Business Manager
- Comprehensive business plan

**Medium to long-term plans (MRM & RMK 11)**
- Satellite clinic for farm and companion animals
- Pet hotel facilities and services
- Special annual budget from Ministry
- Animal Care Foundation
- UVH as CoE of professional services
- Residency programme
- BioNexus status for VLSU
- Referral Centre
- New building and facilities for laboratory diagnosis
- Autonomy

**No of cases:**
- UVH: 17,000 per year
- VLSU: 8,500 per year
Strategic Plan 2016-2020

✓ **Vision**
Veterinary faculty of international repute

✓ **Mission**
To contribute to the advancement of veterinary sciences and animal industries through excellence in teaching, research and professional services for the well-being of the nation and global society

✓ **Values**
Excellence, Diversity, Sustainability, Integrity, Caring

✓ **Goals**
1. **Enhancing the quality and competitiveness of graduates**
2. Generation of values through a steady and sustainable RDCE ecosystem
3. Boosting professional services, industry and community engagement
4. Enhancing the quality of governance

✓ **Strategic objectives (13), Action Plans and Key Performance Indicators**
Strategic Plan 2016-2020

- Malaysia Education Blueprint 2015-2025 (Higher Education) - 10 shifts to support the attainment of system and student aspiration
- UPM Strategic Plan (2014 – 2020) which has 5 goals and 19 strategic objectives
- Putra Global 200
Strategic Vision

- Evaluate key performance indicators (KPI) quarterly (32 KPI UPM)
- QMS audit annually (ISO, EMS, OSHA)
- Annual Management Review Meeting (MRM)
- Malaysian Research Assessment Instrument (MyRA)

- DVM programme accredited by AVBC
- Top 50 QS World University Ranking in Vet. Sci. in 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic Reputation (30%)</th>
<th>Employer Reputation (10%)</th>
<th>Citation per paper (30%)</th>
<th>H-Index (30%)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.0</td>
<td>62.3</td>
<td>64.2</td>
<td>49.4</td>
<td>40.3</td>
</tr>
<tr>
<td></td>
<td>65.8</td>
<td>74.3</td>
<td>71.3</td>
<td>60.3</td>
<td>66.7</td>
</tr>
<tr>
<td>2017</td>
<td>52.6</td>
<td>71.3</td>
<td>73.3</td>
<td>61.8</td>
<td>63.4</td>
</tr>
<tr>
<td></td>
<td>58.8</td>
<td>78.6</td>
<td>75.5</td>
<td>64.5</td>
<td>67.6</td>
</tr>
</tbody>
</table>
International Accreditation

- AVBC 12 Standards for Accreditation
  1. Organisation
  2. Finances
  3. Facilities and equipment
  4. Academic and support staff
  5. Admission and progression
  6. Students and learning support
  7. Curriculum
  8. Assessment
  9. Pre-and para-clinical animals and related resources
  10. Clinical skills development
  11. Continuing and higher education and research
  12. Outcomes assessment

- Initial contact in Dec. 2014 during AVBC meeting in Melbourne Australia
- AVBC Accreditation Committee FVM, UPM
- SER was submitted to AVBC on 5 May 2016
- Consultative Site Visit on 5-8 September 2016
- Final Visit / Audit in 2017

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## DVM Students

### Numbers of students enrolled in the veterinary programme

<table>
<thead>
<tr>
<th>Session (year/year)</th>
<th>2012/2013 Total Number (domestic/international students)</th>
<th>2013/2014 Total Number (domestic/international students)</th>
<th>2014/2015 Total Number (domestic/international students)</th>
<th>2015/2016 Total Number (domestic/international students)</th>
<th>2016/2017 Total Number (domestic/international students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>95 (91/4)</td>
<td>120 (117/3)</td>
<td>107 (105/2)</td>
<td>96 (94/2)</td>
<td>137 (133/4)</td>
</tr>
<tr>
<td>Second</td>
<td>108 (106/2)</td>
<td>91 (87/4)</td>
<td>118 (115/3)</td>
<td>105 (103/2)</td>
<td>95 (93/2)</td>
</tr>
<tr>
<td>Third</td>
<td>90 (88/2)</td>
<td>108 (106/2)</td>
<td>90 (86/4)</td>
<td>118 (115/3)</td>
<td>103 (101/2)</td>
</tr>
<tr>
<td>Fourth</td>
<td>77 (77/0)</td>
<td>88 (86/2)</td>
<td>108 (106/2)</td>
<td>89 (85/4)</td>
<td>118 (115/3)</td>
</tr>
<tr>
<td>Fifth</td>
<td>73 (73/0)</td>
<td>77 (77/0)</td>
<td>88 (86/2)</td>
<td>108 (106/2)</td>
<td>89 (85/4)</td>
</tr>
</tbody>
</table>

- The faculty has introduced interview as part of the admission process starting from 2017/2018 student intake
- Beginning with 2016/2017 intake, each class is divided into two groups for lectures and practical classes

### Foreign students from 8 countries
- Fiji, Saudi Arabia, Sri Lanka, India, Singapore, USA, Mauritius, and Japan

### Awards
- FVM - 49 Excellence Academic Awards
- UPM - 7 Excellence Academic Awards
## Post Graduate Students

<table>
<thead>
<tr>
<th>Students</th>
<th>Postgraduate students - session (year/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern</td>
<td>NA</td>
</tr>
<tr>
<td>Resident</td>
<td>NA</td>
</tr>
<tr>
<td>Intern + MVM</td>
<td>3</td>
</tr>
<tr>
<td>Resident + PhD</td>
<td>NA</td>
</tr>
<tr>
<td>MS</td>
<td>59</td>
</tr>
<tr>
<td>MVSc</td>
<td>41</td>
</tr>
<tr>
<td>PhD</td>
<td>76</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>179</strong></td>
</tr>
</tbody>
</table>

From 14 Countries - Algeria, Indonesia, Iran, Iraq, Malaysia, Nigeria, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, Syrian Arab, Vietnam and Yemen

## Faculty Awards
- **FVM** - Best Thesis for PhD, MVSc and MS & Best MVM Students
- **UPM** – Best PhD and MS Thesis

<table>
<thead>
<tr>
<th>No</th>
<th>Programme</th>
<th>Intakes 2016/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PhD</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>MS</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>MVSc</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>MVM</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Programme</th>
<th>Graduated in 2016/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PhD</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>MS</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>MVSc</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>MVM</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td></td>
</tr>
</tbody>
</table>
Research

- **Five top research areas of the Faculty**
  - Veterinary Biologics and Pharmaceuticals
  - Ruminant Diseases and Herd Health Management
  - Diagnostic Technology on Animal Diseases
  - Veterinary and Comparative Oncology
  - Animal Model in Biomedical Research

- **Two new research programmes**
  - Edible Bird Nest Swiftlet: Production, Health and Product Quality
  - Zoonotic and Emerging Diseases

- **Research findings** are incorporated in courses in the DVM and postgraduate programmes and also used as important resource material in student centered learning such as case studies and PBL

- **Research on teaching and learning** such as PBL, team based learning and OSCE where 6 Faculty members have received Teaching Incentive Grants
UPM is a government-funded research university

Faculty received annual government grants of about 65% of expenditure from 2012 to 2016 for operational activities

The Faculty has strategically planned to generate more income through boosting professional services, industry and community engagement (Goal 3), increasing in number of international student enrolment (Goal 1) and increasing total value of research grants (Goal 2)

Enhancing the quality of governance (Goal 4) could reduce faculty expenditure

UPM Funding Plan Strategy 2015-2020 and Transformation Plan Beyond 2025 includes strategies to increase university income by diversification of sources of funding

The Malaysia Education Blue Print 2015-2025 promises continued government investment and diverse sources of funding for higher education
Student Associations and Committees

- Students contribute to the direction and decision making of the Faculty through several committees and student associations.

- They can express their grouses to the Faculty via the suggestion box, online feedback system (U-response System), individual and class emails, and online Teaching Assessment system.

- Organisation and governance of student activities in the university are coordinated by the Student Representative Council (MPP).

- At the Faculty, Veternak is the main student body assisted by affiliated clubs of Veternak such as the International Veterinary Student Association (IVSA) Malaysian Chapter, Zoologico, One Health Student Club, Putrabiz@Vet, VIP, Dogathon, Prokasih, Vetsports, Ceriathon, and VetCamp Committees who is actively organises and conducts student activities.
High Impact Collaborative Initiative

Leading role

- Asian Association of Veterinary Schools (AAVS)
- South East Asia Veterinary Schools Association (SEAVSA)
- South East Asia One Health University Network (SEAOHUN)
- The Association of Institutions for Tropical Veterinary Medicine (AITVM)

- OiE, FAO and WHO
- MoU/MoA/Collaboration – institutions and universities in United Kingdom, Europe, USA, Australia, Asia and South East Asia
Conclusions

- The veterinary education in Malaysia is recognised globally and accredited by Malaysia Veterinary Council (MVC) and in the process of international accreditation

- Veterinary education needs to address issues and changes in new scenarios, stakeholder expectation, specialization of the profession and challenges in a today borderless world

- Reengineering of the profession may yet to consider critically in a near future by adopting an educational system that combines substantive undergraduate tracking, compulsory internship and designated licensure
Thank You

UNIVERSITI PUTRA MALAYSIA

Berilma Berbakti | WITH KNOWLEDGE WE SERVE