Universiti Putra Malaysia

SELF-REVIEW PORTFOLIO

for

Institutional Maintenance Audit
of Self Accreditation Status | 2020

PART C

CRITERIA AND STANDARDS FOR SELF-ACCREDITING INSTITUTION

Universiti Putra Malaysia Self-Review Portfolio
for Institutional Maintenance Audit
of Self Accreditation Status 2020

UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency
SWAAKREDITASI
SELF-ACCREDITATION
MQA/SA/0004
MULAI / SINCE 2010

AREA 2
Academic Development and Management

Universiti Putra Malaysia Self-Review Portfolio
for Institutional Maintenance Audit
of Self Accreditation Status 2020

AREA 2

ACADEMIC DEVELOPMENT AND MANAGEMENT

		Supporting Document
2.1	**FORMULATION OF LEARNING OUTCOMES**	
	In ensuring the currency and relevancy of learning outcomes, UPM gathered feedback from a wider range of stakeholders and used this as input in the formulation and revision of POs . (2.1.1 and 2.1.2)	
2.1.1	**The HEP must conduct needs analysis which considers market and societal demands through engagement with stakeholders.** The Office of the Deputy Vice Chancellor (Academic & International) has improved the Standard Operating Procedure (SOP) for the development of new programmes and review of existing programmes. The requirement of Needs Analysis is stated in the latest SOP UPM/PU/PS/P001 *Prosedur Pembentukan Program Baharu dan Semakan Semula Program Prasiswazah* **(Appendix 2.1.1 a)**, UPM UPM/PU/S/P001 *Prosedur Pembentukan Program Baharu Pengajian Siswazah* **(Appendix 2.1.1 b)** and UPM/PU/S/ P003 *Prosedur Semakan Semula Kurikulum Program Siswazah UPM* (Appendix 2.1.1 c). All the documents can be accessed by UPM staff via the ISO Portal on the UPM Website (http://www.reg.upm.edu.my/eISO). The need analysis was formulated through various engagement with and feedback from stakeholders such as: a. Market survey b. External assessor c. Feedback from Industrial Training Providers d. Alumni survey e. Employability survey f. Input from Board of Studies g. Exit survey The outcomes from the engagement with stakeholders are obtained regularly to assist in the formulation and revision of the POs of each program. Samples of feedback can be referred to **Appendix 2.1.1 d.** The development of new programmes and revision of existing programmes are also in line with the Malaysia Education Blueprint 2015 – 2025 (Higher Education).	**Appendix 2.1.1 a** *Prosedur Pembentukan Program Baharu dan Semakan Semula Program Prasiswazah* UPM/PU/PS/P001 **Appendix 2.1.1 b** *Prosedur Pembentukan Program Baharu Pengajian Siswazah* UPM UPM/PU/S/P001 **Appendix 2.1.1 c** *Prosedur Semakan Semula Kurikulum Program Siswazah UPM* UPM/PU/S/P003 **Appendix 2.1.1 d** Sample of Feedback from Various Engagements with Stakeholders

		Supporting Document
	The programme benchmarking exercise is done as per standard practice in other local and international institutions. All Deans, Deputy Deans (Academic), Head of Departments and programme coordinators have been trained on PEO assessment in order to assess the achievement of the PEO (8 – 9 May 2019). **(Appendix 2.1.1 e)** Currently, UPM is developing an instrument to conduct such assessment. This was distributed to the Alumni and other stakeholders.	**Appendix 2.1.1 e** Minute of Senate 668.15
2.1.2	**The HEP must align the learning outcomes of its programmes and courses with the Malaysian Qualifications Framework (MQF).** Currently, UPM offers 89 full time undergraduate programmes (81 bachelor's degrees, 7 diplomas and 1 foundation programme) and 66 postgraduate programmes **(Figure 2.1.2 a, Appendix 2.1.2 a).** There are 32 undergraduate and 31 postgraduate programmes with programme standards based on the MQA requirement. Fifteen (15) undergraduate and 14 postgraduate programmes follow the standards set by respective professional bodies. **Figure 2.1.2 a:** Number of Programmes with Programme Standards	**Appendix 2.1.2 a** List of Programmes with/ without Programme Standards

Foundation 1
Bachelor 81
Diploma 7
89 Undergraduate
32 having Programme Standard

160

31 having Programme Standard
Postgraduate 71*
Research 5
***Coursework 66**

PROGRAMME STANDARDS
Criteria set based on what is considered the minimum level that should be attained by the HEPs to ensure academic programme in a particular field of study can be adequately delivered. It covers all the MQF qualification levels: from certificate up to doctoral degree.

The learning outcomes of programmes and courses offered by UPM are aligned with the Malaysian Qualifications Framework (MQF). Table 2.1.2 shows the mapping of 9 programme outcomes (PO) based on the Ministry of Education's guidelines and 8 MQF's programme outcomes (PO) adopted for the undergraduate programmes. UPM adopts 9 program outcomes (PO) based on Ministry of Education's guidelines for the undergraduate programs and maps these with the MQF's 8 POs as shown in **Table 2.1.2.** For postgraduate programmes, UPM follows 7 MQF

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POs which comply with the Postgraduate programme standards: Masters and Doctoral Degrees **(Appendix 2.1.2 b).**	**Appendix 2.1.2 b** Minute of JKKU Meeting 278

Table 2.1.2: The Mapping of UPM's 9 POs and MQF's 8 POs for the Undergraduate Programmes

| PO	UPM's 9 PO Domains based on MOHE's guidelines	MQF's 8 PO Domains
PO1	Knowledge	Knowledge
PO2	Practical skills/Psychomotor	Practical skills/ Psychomotor
PO3	Critical thinking and problem-solving skills-CTPS	Critical thinking and problem-solving skills-CTPS
PO4	Communication skills-CS	Communication, leadership and team skills-CS, LS, TS
PO5	Social skills, teamwork and responsibility-TS	Social skills and responsibility-TS
PO6	Values, ethics, moral and professionalism-EM	Ethics, professionalism and humanities-EM
PO7	Information management and lifelong learning skills-LL	Lifelong learning and management skills-LL
PO8	Managerial and entrepreneurial skills-KK	Entrepreneurial and managerial skills-KK
PO9	Leadership skills-LS	-

Starting from 1st April 2019, the application for new academic programmes must comply with the documentation for Provisional Accreditation stipulated in the Malaysian Qualification Framework (MQF) 2nd Edition. Whereas, documentation for Full Accreditation and Maintenance Audit for the existing academic programmes must adhere to the MQF 2nd Edition by 1 April 2020. The MQF 2nd Edition has restructured 8 learning outcome domains into 5 learning outcome clusters. Taking into consideration the new clusters, UPM's 9 existing PO domains are retained, while 1 new PO domain is formed and known as PO10 - Numeracy Skills (with the abbreviation "NS"). Besides, PO7-LL" which was previously known as Lifelong Learning and Information Management has been re-titled to Digital Skills and Lifelong Learning and Information Management. All the descriptions of UPM's 10 generic PO domains have also been rewritten according to the MQF 2nd Edition as shown in **Figure 2.1.2 b (Appendix 2.1.2 c and 2.1.2.d).**

Appendix 2.1.2 c
 Senate Paper (658/9)

Appendix 2.1.2 d
 Minute of Senate Meeting 658.11

Figure 2.1.2 b : The Mapping of existing UPM 9 POs with learning outcome clusters MQF 2.0
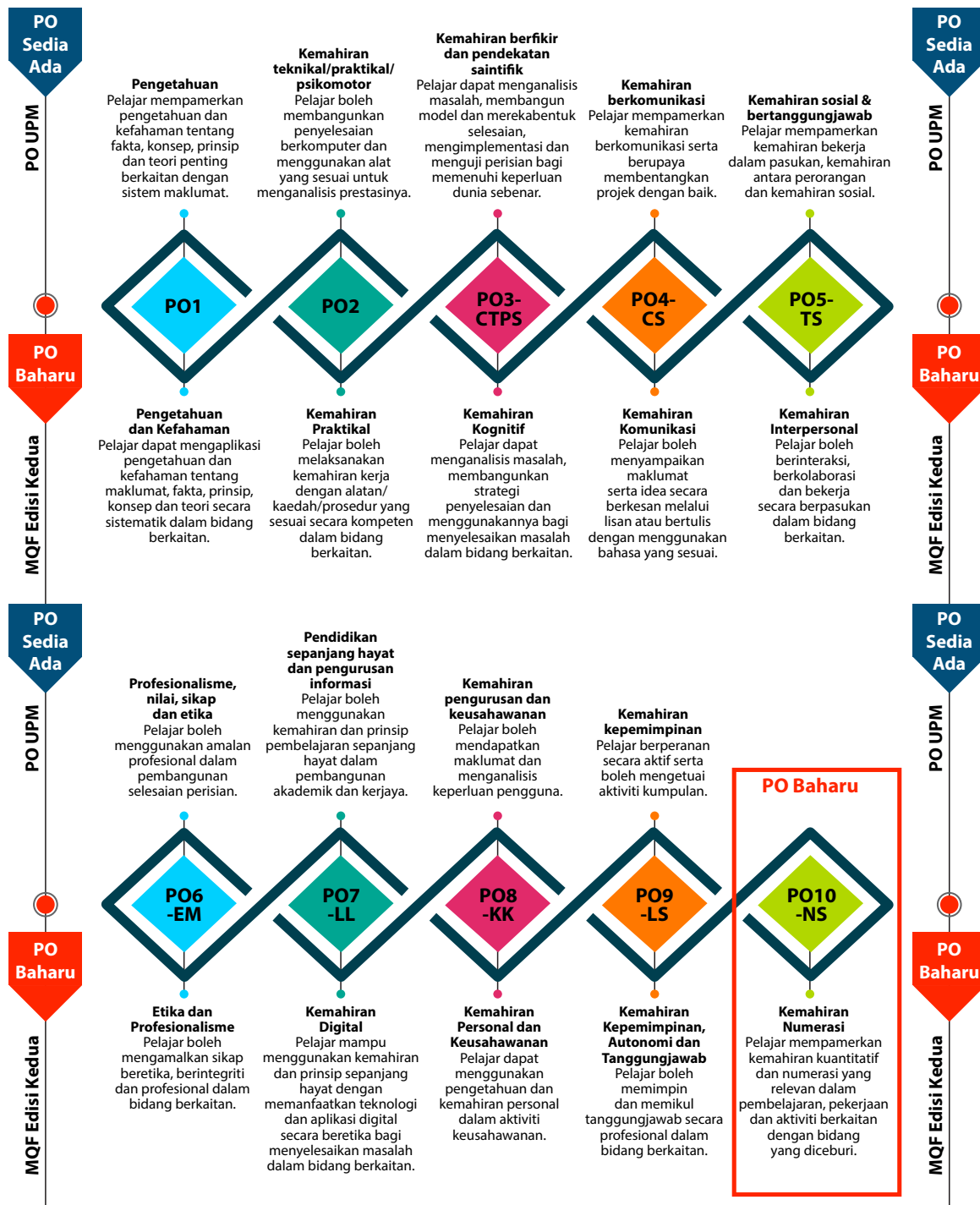
To ensure the programme outcomes (POs) are attained, all course outcomes (COs) are aligned with the new UPM POs. Each course in a programme is mapped against the 10 POs based on the course requirement, and the POs are distributed across the curriculum. Knowledge (PO1) is compulsory for all courses and other POs must be kept within the range of 5 – 10%. Refer to **(Appendix 2.1.2 e).**

Currently, UPM is formulating a guideline for the measurement of PEO attainment. After the training on PEO assessment conducted on 8 – 9 May 2019, faculties have submitted refinements of PEOs (if applicable) for all their undergraduate programmes and the faculties are entrusted to monitor the achievement of PEOs.

Appendix 2.1.2 e
Panduan Penyediaan Dokumen Program Pengajian Edisi 2016 Ver. 23.8.2016) (Example of Jadual 5 Pemetaan Hasil Pembelajaran Kursus Dan Hasil Pembelajaran Mengikut Keperluan Standard)

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2.2 (a)	**CURRICULUM DESIGN, DELIVERY AND ASSESSMENT** **Curriculum Structure and Content**	

UPM ensures the curriculum design and delivery promote a variety of delivery modes that incorporates the latest pedagogical advancement and teaching and learning technologies. (2.2.1) Besides, UPM regularly monitors and reviews its policy on curriculum design and delivery that incorporates the development of current and future skill sets. (2.2.2)

2.2.1	**The HEP must have a policy on curriculum design and delivery which must be regularly reviewed and improved.** UPM has Standard Operating Procedure (SOP) for the development of new programmes and review of existing programmes. The SOP entitled 'UPM/PU/PS/P001 *Prosedur Pembentukan Program Baharu dan Semakan Semula Program Prasiswazah UPM*', 'UPM/PU/S/P001 *Prosedur Pembentukan Program Baharu Pengajian Siswazah* dan UPM/PU/S/P003 *Semakan Semula Kurikulum Program Siswazah UPM*' have been regularly reviewed and were last reviewed in 2020. All programmes must be reviewed before reaching a full cycle of 3 to 5 years. The cycle of curriculum revision is also based on the document "Guidelines to Good Practices: Monitoring, Reviewing, Continually Improving Institutional Quality (GGP:MR-CIIQ)" provided by the MQA. However, any programme may be reviewed before it reaches a full cycle to ensure it remains competitive, updated and compliant with new standards imposed. Starting from April 2019, the development of new programmes must also be aligned with the MQF 2.0: Mapping of Learning Outcomes **(Appendix 2.2.1 a)** while the deadline for compliance of curriculum review is effective from April 2020. In addition, all requirements must comply with the MOE guideline entitled Garis Panduan Permohonan Program Akademik (GPPPA) effective from January 2019 **(Appendix 2.2.1 b).** The monitoring of undergraduate and postgraduate programmes that are due for revision and the entire reviewing process is administered by the Academic Governance Division (BAKD) and School of Graduate Studies (SGS). The status of the revision is discussed in the JKKU/JKPSU meetings **(Appendix 2.2.1 c).** To ensure that the curriculum for all academic programmes address national interest and international requirement, UPM continuously seeks for international accreditations. External assessors from top universities are engaged to evaluate and give feedback on the quality of the programmes. To enhance the standard of curriculum for all programmes and to ensure the programmes meet the current requirements, UPM benchmarks against similar programmes offered in top universities and solicits feedback from the programme Board of Studies, external	**Appendix 2.2.1 a** Minute of Senate 645.08 and JKKU 259.09 : Bachelor Programme for Computer and Engineering **Appendix 2.2.1 b** Minute of Senate Meeting 657.10 **Appendix 2.2.1 c** Status of Revision – Minute of JKKU Meeting 284/6

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assessors and relevant industries. Currently, UPM has been granted with 40 international accreditations for its academic programmes.

Figure 2.2.1 a: List of Programmes Accredited by International Accreditation Bordies
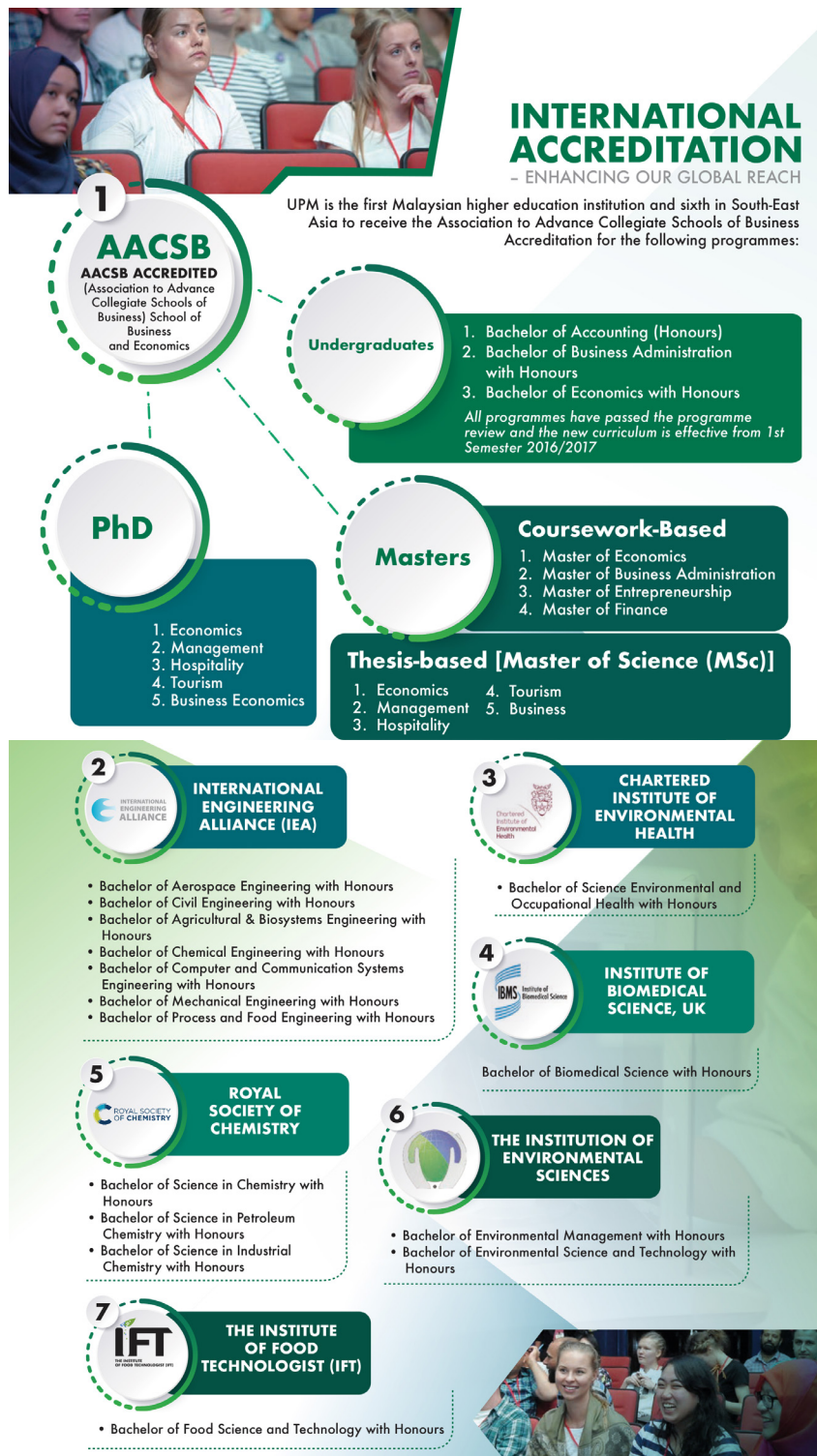
UPM regularly monitors and reviews its policy on delivery methods which incorporates the development of current and future skills through the implementation of impactful

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teaching and learning methods. In 2015, the Ministry of Education has instructed all Higher Learning Institutions to incorporate at least five elements of High Impact Educational Practices (HIEPs) of which Service Learning / Community Based Learning (CBL) is a compulsory element **(Appendix 2.2.1 d).** All of UPM's undergraduate programmes have complied with this requirement since 2015.	**Appendix 2.2.1 d** Example of Curriculum Structure, Content and Reviews
UPM offers wider accessibility and flexibility to students by ensuring that all lecturers practice blended learning (BL) approach. To further support flexible curriculum and to celebrate diversity in learning styles, substitute BL (PTG) mode has been introduced and was approved in the Senate meeting on 8th August 2019 **(Appendix 2.2.1 e)** as shown in **Figure 2.2.1 b and 2.2.1 c.**	**Appendix 2.2.1 e** Minute of Senate Meeting 664.10

Figure 2.2.1 b : Implementation of Blended Learning Substitute (PTG)
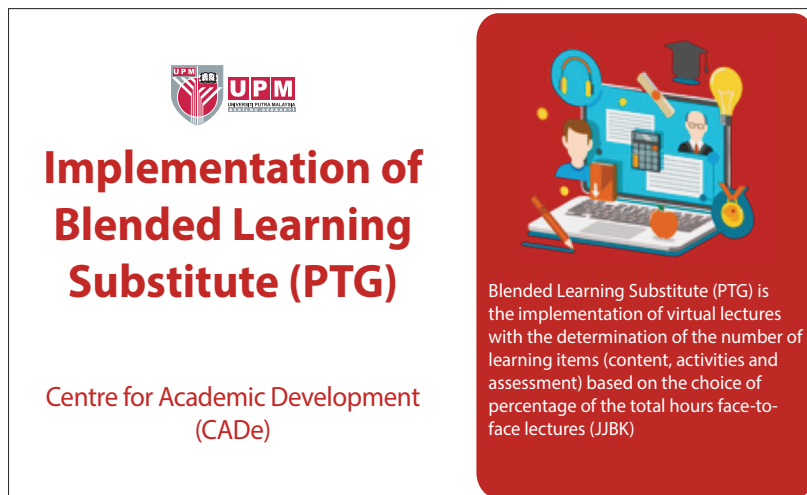
Figure 2.2.1 c: Comparison between different modes of Blended Learning

UPM BL achievement has had a positive trend from 2015 until 2020. In 2018, BL achievement in UPM has surpassed the national target set by the ministry.

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Table 2.2.1 : BL Achievement in UPM

Target and Achievement	2015	2016	2017	2018	2019	2020 (As of Nov 2020)
National Target (DePAN)	30%	50%	50%	50%	50%	50%
UPM Achievement	**33%**	**43.40%**	**47.92%**	**69.66%**	**77.22%**	**85.72%**

In response to the Industrial Revolution 4.0 (IR 4.0) global programme criteria, UPM offers programmes through various International Collaborative Programmes with 8 university partners as listed in the following infographic.

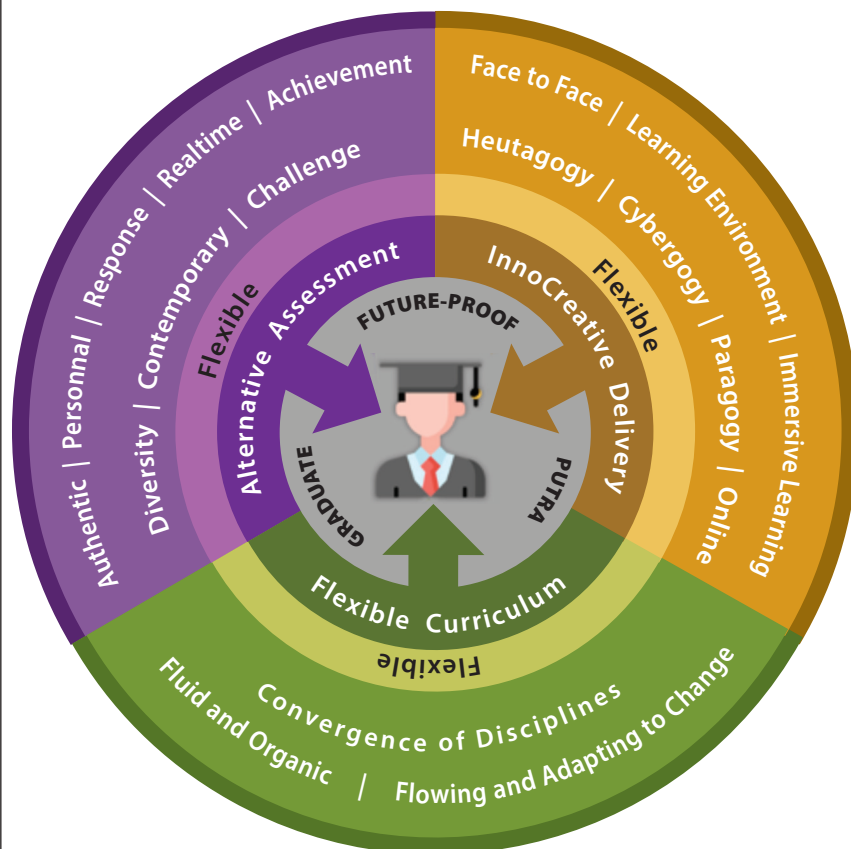**Figure 2.2.1 d:** UPM International Collaborative Programme

In facing the challenges of technological sophistication and IR 4.0, the academic transformation initiative was implemented to produce Future-Proof PUTRA graduates (See UPM Academic Transformation). The Academic Transformation Committee was established in 2018 which comprises three task forces, namely, (i) Curriculum Redesign, (ii) Innovative Teaching and Learning Delivery Methods, and (iii) Alternative Assessment. The Curriculum Redesign Task Force is responsible for drafting the guidelines for the development of a flexible curriculum while the Innovative Teaching and Learning Delivery Methods Task Force is responsible for providing the best practices for teaching delivery to support flexible curriculum. The Alternative Assessment Task Force develops the guidelines and references for assessment

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methods which are diverse, holistic and relevant to the achievement of the envisioned flexible curriculum as shown in **Figure 2.2.1 e.** **Figure 2.2.1 e:** UPM Academic Transformation Framework 	See UPM Academic Transformation (Serdang: CADe, UPM, 2019) **Refer to the link:** (a) PUTRAFLEX: UPM Flexible Curriculum (Serdang: CADe, UPM, 2019) (b) PUTRAFLEX: Garis Panduan Pembangunan Kurikulum Fleksibel UPM (Serdang: CADe, UPM, 2019) and (c) PUTRAFLEX: Guidelines for Development of UPM's Flexible Curriculum (Serdang: CADe, 2019)
The Curriculum Redesign Task Force has launched UPM's flexible curriculum known as PUTRAFLEX which promotes convergence of disciplines and offers diverse study paths, which are in line with IR 4.0 **(Appendix 2.2.1 f)**. In order to allow for convergence of disciplines, PUTRAFLEX promotes Double Degree, Double Major and Major-Minor programme structures. In addition, the number of elective courses will be expanded and diversified to allow for convergence of disciplines in PUTRAFLEX. The elective courses will be grouped into two types; (i) Designated Courses and (ii) Flexible Courses. Elective courses offered under Designated Courses are divided into three groups: (i) Convergence of Discipline Group *(Kelompok Disiplin Bertemu)*, (ii) Structured Group *(Kelompok Berstruktur)* and (iii) Functional Skills Group *(Kelompok Kemahiran Fungsional)*. On the other hand, Flexible Courses will be offered to enable students to develop their own courses with knowledge/skill of their interests and needs. For information on the concept and PUTRAFLEX, see: (a) PUTRAFLEX: UPM Flexible Curriculum, (b) PUTRAFLEX: Garis Panduan Pembangunan Kurikulum Fleksibel UPM and (c) PUTRAFLEX: Guidelines for Development of UPM's Flexible Curriculum. To date, CADe has informed members of the Teaching and Learning Committee, UPM (JKPP UPM) about the concept of PUTRAFLEX and	**Refer to the link:** **Appendix 2.2.1 f** *Kertas JKPP 36.1: Cadangan Pelaksanaan Kurikulum Fleksibel Yang Bersifat Boleh Lentur dan Organik (PUTRAFLEX) UPM*

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the necessary preparation towards its implementation. The preparation involves various entities in UPM, namely Faculties, Academic Division, CADe and Center for Quality Assurances (CQA). At the same time, CADe has also taken the initiative to create awareness and establish the understanding on PUTRAFLEX especially the concept of flexible curriculum that is flexible and organic in nature through a series of webinars and curriculum review workshops which are open to all UPM academic staff.

In line with 7th High Impact Educational Practices (HIEPs), UPM has developed an initiative to implement Service-based Learning (SL)/ Work-based Learning (CBL) on academic programmes. Since 2015, all academic programs at UPM are required to implement SL or CBL. To achieve at least 75% of academic programs implementing SL or CBL, UPM provides three implementation options namely i) through co-curricular courses namely QKK2101 Bakti Siswa, ii) through existing courses, or through new courses i.e. service courses learning.

In 2019, the Ministry of Higher Education Malaysia launched SULAM which is the abbreviation for "Service Learning Malaysia". SULAM is a Malaysian rebranding of the Service-based Learning (SL), in order to optimize the function of "University for Society". SULAM is a learning approach that combines three key components: academic, community engagement and student practical experience. SULAM is implemented through courses with structured credits to enable students to engage in community-related activities. SULAM-UPM is implemented to highlight the function of UPM in society and to prepare graduates to become public intellectuals responsible for resolving societal issues and problems. SULAM resonates with UPM's motto "With Knowledge We Served" *(Berilmu Berbakti)*. In order to smooth its implementation, UPM established a SULAM-UPM Working Committee in 2019 comprising the Deputy Vice Chancellor (Academic and International) as the patron, Director of the Center for Academic Development (CADe) as chairman, Deputy Director of CADe as coordinator and representative from each Faculty. This working committee is established to regulate SULAM governance in UPM, document data related to the implementation of SULAM (Service Learning Malaysia) at UPM and organize training sessions for SULAM implementation to UPM academic staff. Through this working committee, the delivery of academic courses through SULAM in each academic program at UPM is monitored systematically. In order to establish a one-stop referral center for SULAM, UPM has provided a main menu on SULAM in the official website. This SULAM main menu also links to "Putra Learning Hub" platform under Innovative Delivery Transformation and "PrIDe" (abbreviation of Putra InnoCreative Delivery). All websites provide information related to SULAM activities at UPM, including general description of the concepts and

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	approaches, as well as the sharing information of SULAM best practices by UPM staff. In terms of achievement, until 2020 as many as 51.2% of academic programs in UPM have already implemented SULAM through various courses. **(Appendix 2.2.1 g and Appendix 2.2.1 h)** **Figure 2.2.1 f:** The Logo of Service-Learning Malaysia (SULAM) UPM Agriculture is UPM's niche area. Empowering UPM as a Centre of Excellence in Agriculture is one of the strategic goals in *Pelan Strategik UPM 2014 – 2020* and this is in tandem with UPM's tagline 'Agriculture. Innovation. Life'. These initiatives reflect UPM's strength and leadership in agriculture, which contributes greatly to life enhancement, knowledge enrichment and innovation. Hence, specific attributes on agriculture are inculcated in UPM students via learning outcomes and co-curricular activities. Since 2006, UPM has offered PRT2008 Agriculture and Man as a compulsory course in all programmes and was later replaced by PRT2009 Agriculture and Life in 2019. This new course embeds experiential-based learning elements with a strong focus on agriculture. The experience gained from this unique learning approach will develop distinct and unique attributes of UPM students who are successful practitioners in cutting edge and sustainable agricultural-based technology/industry **(Appendix 2.2.1 i).**	**Appendix 2.2.1 g** *Kertas JKPP 35.4.6: Penubuhan Jawatankuasa Kerja SULAM-UPM* **Appendix 2.2.1 h** *Laporan Pengumpulan Data SULAM Semester Kedua 2019/2020* **Refer to the link :** · **SULAM-UPM** · Innovative Teaching Delivery Technique and Delivery **Appendix 2.2.1 i** Minute of Senate Meeting 661.04
2.2.2	**The curriculum structure and content must address topics of national and international importance, taking into account institutional goals, MQF qualification descriptors, appropriate programme standards, professional and industry requirements as well as good practices in the field.** In designing and reviewing any programme curriculum, views from stakeholders are taken into account in order to ensure that critical knowledge and skills are imparted	

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	to students. The design and review process also considers the standards and requirements of respective professional bodies and industries. All faculties and schools are advised to appoint a committee that ensures the standards and requirements are adhered to, which in turn will safeguard the academic quality of the programmes. This committee is responsible for overseeing the review and accreditation of programmes.	
(b)	**Instructional Method**	
	UPM uses innovative instructional methods in a conducive learning environment to improve student learning experience in attaining learning outcomes (2.2.3). UPM also supports the establishment of state-of-the-art learning spaces to improve students' learning experience (2.2.3).	
2.2.3	**The HEP must use appropriate instructional methods in a conducive learning environment to improve student learning experience.** UPM provides a conducive formal and informal learning environment to improve students' learning experience. Conducive formal learning environment includes comfortable classroom, laboratory and e-learning facilities. Student-centred learning (SCL) is emphasised using formal and informal learning environments. SCL approaches provide opportunities for students to participate and engage actively in their learning. Students' active participation is achieved through interaction during classes, tutorials, laboratories, group discussions, projects, problem-solving exercises, fieldwork, seminars, as well as integration of technology (technology enhanced active learning). To make the SCL approaches more flexible, they are variously promoted to extend existing practices such as problem-based learning, case-study and modular. Besides, some of the High Impact Educational Practices (HIEPs) such as first year seminar, capstone projects, internship and community/service-based learning, are also widely employed in UPM **(Appendix 2.2.3 a).** One of the UPM Academic Transformation committee task forces is responsible for Innovative Teaching and Learning Delivery Methods. The task force has established the Putra Innovation Delivery (PrIDe) guideline. This guideline has proposed 15 innovative delivery approaches such as game-based learning and gamification, challenge-based learning, immersive learning and simulation-based learning to complement the existing SCL and HIEPs approaches. Ten initiatives to transform delivery have been recommended which include personalisation, global exchange and innovative learning space. To energise the	**Appendix 2.2.3 a** *Buku Program Pertandingan Inovasi Terbaik Dalam Pengajaran dan Pembelajaran 2018* **Refer to the link :** Putra Innovation Delivery (PrIDe)

|	Supporting Document
transformation, a set of educator transformation rubrics has been presented, along with the best practices and guidelines. In addition, teaching and learning methods are aligned with the current development and needs of 21st century learning. For example, UPM conducts blended learning through e-learning technologies as delivery tools for teaching and assessment activities. For this purpose, UPM uses the PutraBLAST platform as an official medium for e-learning. The PutraBLAST platform is continuously upgraded to include functions relevant to the demand of delivering effective learning. It has been upgraded from Moodle version 2.8 to version 3.8. Moodle 3.8 allows users to benefit from various functions including: a) various modes of two-way and interactive communication through group chat, chat and forum; b) interactive content development through H5P plugin which enables content, activity and assessment to be integrated. H5P is also encouraged to be used by students so they can co-curate learning through creation of interactive contents which encourages cybergogy, heutagogy and paragogy; c) personalised learning through activity completion reporting, participation logs, and learning analytic; d) implementation of badges and competencies to encourage participation and motivation, as well as gamifying the course; e) synchronous and asynchronous lessons to be conducted virtually whilst still providing the means when learning technologies is required to support face-to-face lesson meetings; and f) fresher and more attractive interface layout and design. Existing functions which are still relevant include: a) learning materials (files) upload; b) embedded based display; c) integration of learning materials from external tools (e.g., SCORM, LTI); d) chat and forum; e) choice; f) glossary; g) quiz; h) assignment; and i) report. UPM also encourages the use of other e-learning platforms such as Padlet and Popplet, for interactive and two-way communication. UPM is also benefiting from the increasing development and implementation of innovative learning approaches (e.g., service-based learning, challenge-based learning and gamification), products and solutions (e.g., board games, augmented reality applications and mobile apps)	

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	developed by academic staff either out of their own initiative or as the output from the Innovation in Teaching and Learning Incentive Grants (GIPP).

UPM also practices online delivery through Massive Open Online Course (MOOC). The focus of MOOC development is based on three types of courses offered, which are niche, competency and lifelong learning. To date, there are 43 MOOC courses developed and offered in UPM. The courses encourage global learning where students can interact with other students from outside of UPM who are registered for similar courses. CADe provides a series of training and supporting activities to assist in the development of MOOC courses. The MOOC courses are offered/on a platform called PutraMOOC (see **Figure 2.2.3 b) (Appendix 2.2.3 b).**

Figure 2.2.3 a: PutraMOOC Platform
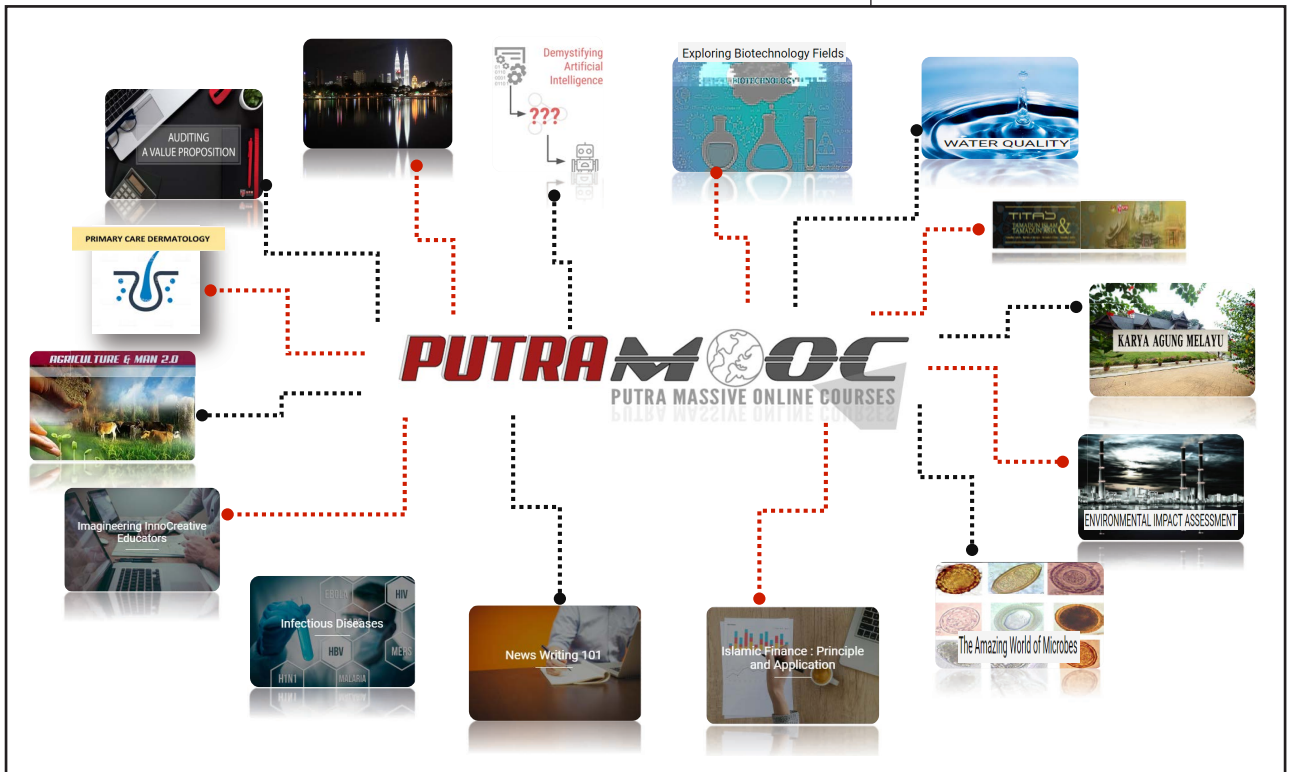
 | **Appendix 2.2.3 b**
List of MOOC courses |
| | UPM also supports the establishment of state-of-the-art learning spaces to improve students' learning experience. For example, Putra Learning Space and Putra Future Classroom (Faculty of Educational Studies) were introduced in 2018. Along with that, new initiatives under Putra Future Classroom (Experiential Learning Spaces) have been proposed in RMK-12 **(Appendix 2.2.3 c).** To facilitate new initiatives, UPM continues to upgrade the internet bandwidth as a way to provide wider internet access to support technology-enabled teaching and learning activities. | **Appendix 2.2.3 c**
Smart Education UPM – RMK-12 |

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Figure 2.2.3 b: Proposal for Putra Future Classroom (Experiential Learning Spaces) in RMK-12

8 TYPES OF PUTRA FUTURE CLASSROOM (Experiental Learning Spaces)

Definition: 1
Simulating the work setting allows students to situate learning in the real context.

Definition: 2
Observation or understand natural behaviour.

Definition: 3
Prepare students who have respect for diversity has connected skills, high communication and collaboration skills.

Definition: 4
This 21st century learning environment space could support bring your own device (BYOD) concept and has a layout suitable for both formal and non-formal learning requirements.

Definition: 5
This learning space prepares students for the digital being, where learning is situated in a virtual world with assistive device.

Definition: 6
Support multidisplinary learning activities and range from creative content production studio and could be also set up as a lab.

Definition: 7
Studies related to agriculture, forestry and veterinary could benefit the integration of technology into their normal learning space.

Definition: 8
Combination of 2, 3, 4 or other type of PFC

Labels: **Others** (8), **Simulative Industrial Experience** (1), **Experimental Behaviour Observation Space** (2), **Global Learning** (3), **Collaborative Learning Space** (4), **Immersive Learning Space** (5), **Makerspace** (6), **Green Learning Space** (7)

Informal learning is also part of the learning experiences offered in UPM to enhance students' competency. UPM provides facilities for formal and informal learning including *Ladang Sains Pertanian* 10B, Ladang 16, Ladang 2 (transferred and improved i.e. glasshouse), Ladang Puchong, Sultan Idris Shah Forestry Education Center (SISFEC), and L'apprenti Putra Restaurant, SCL room in School of Business and Economics, UPM Teaching Hospital, University Agricultural Park, Family, Adolescent and Child Research Centre of Excellence (FACE lab) in Faculty of Human Ecology, PUTRA FM (Faculty of Modern Languages and Communication). Besides enabling students to think and master knowledge through contextual experiences, this method can enhance students' interest and attitude as well as developing skills to collect, process and analyse data and information.

In 2018, Putra InnoCreative Carnival in Teaching and Learning (PICTL) was organized by CADe. PICTL is a national event that showcases higher education teaching and learning innovation through poster competition. Specifically, PICTL aims to enhance the culture of innovation and creativity in teaching and learning among educators and students. PICTL 2018 received warm reception from educational public and private institutions as well as teacher training institutions. A total of 350 educators

		Supporting Document
	and students participated in PICTL 2018. Continuing the success of PICTL 2018, CADe again organized PICTL in 2019. In conjunction with the PICTL, Putra InnoCreative Award was introduced to recognize the efforts of UPM's academic staff who exhibit best practices and innovation in teaching and learning. There are four main categories of Putra InnoCreative Awards which are: 1. Best InnoCreative Educator in PutraMOOC 2. Best InnoCreative Educator in Transformative Teaching 3. Best InnoCreative Educator in Immersive Learning Experience 4. Best InnoCreative Educator in Alternative Assessment	
(c)	**Assessment**	
	UPM assessment system and methods are systematically documented **(2.2.4 and 2.2.5)** and analysed. Feedback is communicated **(2.2.5)** for improvements of student learning and course delivery.	
2.2.4	**The HEP must have clear policies and procedures regarding management and security of assessment-related documents from the preparatory stage to the award of qualification results including appeal process which must be regularly reviewed and improved.** **(a) Examination Regulations and Policy** The Examination Regulations and Policies at UPM are governed by *Kaedah-Kaedah Universiti Putra Malaysia (Perkara Akademik Prasiswazah)* 2014 *(pindaan 2017)* and UPM Rules (Graduate Studies) 2003 (Revision 2015-2016) **(Appendix 2.2.4 a and 2.2.4 b)**. Details of the examination regulations for undergraduate studies can be accessed at UPM/PU/PS/P008–P011 and UPM/PU/S/P013 while the details for postgraduate studies can be retrieved at UPM/PU/S/P014 and UPM/PU/S/AK03/02. The Academic Governance Division (BAKD) issues the Final Examination Notice *(Notis Peperiksaan Akhir)* to students through the Faculty which describes the conduct of the examination. Each faculty follows this standard set of procedure to conduct related examinations according to the *Garis Panduan Penetapan Penaksiran Hasil Pembelajaran Program* (623th Senate Meeting, 18th August 2016) and *Garis Panduan Penetapan Penaksiran Hasil Pembelajaran Program bagi Program Diploma* (630th Senate Meeting, 7th February 2017) **(Appendix 2.2.4 c)]**. There are several committees that assist the Senate in carrying out the duties related to examination regulations and policies. One of these committees is the University Curriculum Committee (JKKU), chaired by the Deputy Vice Chancellor (Academic and International) and the members	**Appendix 2.2.4 a** *Perkara Akademik Prasiswazah 2014 Pindaan 2017* and Minute of Senate Meeting 653 **Appendix 2.2.4 b** UPM (Graduate Studies) Rules 2003 (Revision 2015-2016) **Appendix 2.2.4 c** Minute of Senate Meeting 623.20 and Senate 630.03

	Supporting Document
consist of the faculty Deans and three appointed Senate members. The other committee is the University Graduate Studies Committee (JKPSU) which is also chaired by the Deputy Vice Chancellor (Academic and International), and it consists of four Senate Members, Deans of Faculties, Dean of School of Graduate Studies, and Directors of Institutes. The TOR for both these committees are in **Appendix 2.2.4 d.**	**Appendix 2.2.4 d** Term of reference of JKKU and JKPSU
For undergraduate and postgraduate studies, the Senate Review Committee and Postgraduate Review Committee assist the Senate in deliberating appeal cases for grade review and termination of candidature, making decisions for such cases and reporting to the Senate on any decision made for endorsement. In exercising its functions, the committee may request a faculty representative to assist the Committee in making its decision. The Senate Review Committee consists of Deputy Vice Chancellor (Academic and International) or any of the other Deputy Vice Chancellors, as identified by the Senate (as Chairman), Dean of the Faculty at which the applicant is enrolled, two members of the Senate and the Registrar or his representative (as Secretary). The Postgraduate Review Committee comprises Deputy Vice Chancellor (Academic and International), two members of the Senate and Dean of the School of Graduate Studies. In addition, the Dean of the relevant faculty or Director of Institutes is invited to provide input **(Appendix 2.2.4 e).**	**Appendix 2.2.4 e** Term of Reference of Senate Review Committee (Postgraduate & Undergraduate)
(b) Confidentiality and Security of Assessment Processes	
In accordance with the QMS, final examination questions are sealed and kept in the exam vault room or secured cabinet at each faculty. Only authorised personnel have access to the room or secured cabinet and only chief invigilators (course lecturers or coordinators) are allowed to collect the examination papers no earlier than one hour before the examination time **(Appendix 2.2.4 f and 2.2.4 g).**	**Appendix 2.2.4 f** *Prosedur Penyediaan Kertas Peperiksaan Akhir Prasiswazah* UPM/PU/PS/ P008 **Appendix 2.2.4 g** *Garis Panduan Peperiksaan* PU/PS/GP007
After the papers have been examined, the results of each course can only be entered in the system by the course lecturer/coordinator. The academic records of undergraduates are managed by the University's Academic Division (BAKD) while those of postgraduates are managed by the School of Graduate Studies (SGS). UPMET, which is a business arm of UPM, manages the assessment records of the undergraduate and postgraduate courses that they offer in distant learning mode **(Appendix 2.2.4 h and 2.2.4 i).**	**Appendix 2.2.4 h** *Prosedur Pengurusan Peperiksaan Akhir Kursus Pengajian Siswazah* UPM/PU/S/P013 **Appendix 2.2.4 i** *Prosedur Penilaian Tesis Pelajar Siswazah* UPM/PU/S/PO14
Students' academic records are available online; however, they are password protected. Only authorised personnel can access and manage these records.	

		Supporting Document
	(c) Appeal Policy For the purposes of appeal, students' answer scripts from all examinations and assignments are kept for a minimum period of one year. All records of evaluation are made available for review by students at their faculty. For undergraduates, the appeal policy is as stated in Universiti Putra Malaysia Rules (Academic) 2003 (Pindaan 2005) and the *Garis Panduan Peperiksaan* (PU/PS/GP007). Postgraduate students may file a review of grade not later than two weeks after the announcement of results as stipulated in Section 36, UPM Rules (Graduate Studies) 2003 (Revision 2014-2015). A postgraduate student whose candidature is terminated may apply for a review against termination as stipulated in Section 4, UPM Rules (Graduate Studies) 2003 (Revision 2014-2015).	
2.2.5	**The HEP must provide sufficient autonomy to the relevant departments to develop and review assessment criteria and methods comprising the formative and summative components.** The rules and regulations concerning assessments are determined by the Senate. The Academic Governance Division (BAKD) and School of Graduate Studies (SGS) are the custodian offices for rules and regulations for undergraduate and postgraduate studies respectively. However, full autonomy is accorded to the department/faculty in implementing these rules and regulations. Departments, subject to assessment regulations, can decide on assessment criteria, including the methods and distributions of weights for continuous and final assessments. The departments are responsible to ensure that the assessments are aligned to the course outcomes. The moderation and verification of final assessments are done at the department level. **(Appendix 2.2.5).** Assessment criteria are reviewed based on student's achievement in POs, which can be accessed through eSMP (course assessment marks (CAM)) that allows the lecturers to monitor individual student's PO attainment. Lecturers and their students may deliberate on various components and percentage of the course work as long as the percentage allocated for the coursework complies to the guideline by CADe (e.g.: 60 – 100%). Programmes that need to comply to a specific programme standard or accredited by professional bodies must follow their respective standards. In general, the final assessment accounts for 40 percent of the overall course assessment. However, for programmes that must comply to their programme standards or are	**Appendix 2.2.5** **Refer to 2.2.4 c** Minute of Senate Meeting 623.20 and Senate 630.03

	Supporting Document
accredited by professional bodies, the distribution of assessment is based on the guidelines given. UPM has a systematic mechanism in place to ensure validity, reliability, consistency, currency and fairness of assessments as outlined in the following : 1. Assessments are evaluated by external assessors of the programme which are done according to the cycle of the curriculum review (3 – 5 years). The appointment of external assessors has to be approved by the Senate, and the selection is based on the scholarly standing of the professor and the ranking of their institutions. UPM only appoints external assessors from a University that ranks in the World Top 200 or from a field of study that ranks in the World Top 200. 2. Moderation of examination questions are done by a committee appointed by the department. 3. Final examinations have to be submitted in two equivalent sets to account for students who may be absent due to reasonable causes. 4. Final examinations have to be submitted together with the answer scheme. 5. Final examinations are prepared in English with the *Bahasa Melayu* translation. 6. UPM ensures conduciveness of the examination halls. 7. The schedule for examinations takes into account students' timetable. 8. Lecturers continue to explore alternative assessments. This can be seen from their efforts in the research work for *Geran Insentif Pengajaran Pembelajaran* (GIPP) as well as the PICTL Exhibition that gives an award for innovative assessment.	
2.2.6 **The methods of student assessment, grading criteria and results must be documented and communicated to students at appropriate schedules.** Assessment methods for each course are stipulated in the teaching plan in the eSMP at least two weeks before the start of the semester. This has to be endorsed by the Head of the Department. Course outlines are distributed to students on the first day of class which includes the assessment plans, and these are also made available in PutraBLAST. Students can access their continuous assessment marks through the eSMP. To ensure fairness to students, evaluation criteria for continuous assessments are conveyed to them during class time. The academic procedure states that the first assessment of any course is to be conducted by the sixth week of the semester, and the results are to be released no later than the 7th week of the semester. Students who obtain less than the passing marks, as per programme standards	

	Supporting Document
requirements, have to be given guidance by the lecturer in accordance with the QMS that is implemented at UPM. Upon discussion with the students, the lecturers fill in the *Borang Pengendalian Pelajar Bermasalah*, and the form is also extended to the academic advisor. Continuous assessment results (e.g. quizzes, mid-semester tests, assignments and projects) are made available to students by week 15 of the semester through the eSMP **(Appendix 2.2.6 a and Appendix 2.2.6 b).** However, final grades will only be released after the results are approved by the Senate. Final grades are posted in the online student portals, namely eSMP and iGIMS, immediately after the Senate's endorsement. The validity and reliability of the examination system and fairness of students' assessment are assured as follows: - The Academic Governance Division (BAKD) issues the Final Examination Notice *(Notis Peperiksaan Akhir)* to students through the faculty. This notice describes the conduct of the examination. - Each faculty follows this standardized set of procedure to conduct related examinations according to the *Garis Panduan Penetapan Penaksiran Hasil Pembelajaran Program* and *Garis Panduan Penetapan Penaksiran Hasil Pembelajaran Program bagi Program Diploma*. - The moderation of examination questions and review of examination questions are conducted by a committee which consists of lecturers who are appointed by the Head of Department to ensure the validity and reliability of assessments. - To ensure fairness to students, the evaluation criteria for continuous assessments are conveyed to them. - For programs accredited by professional bodies, the relevant bodies periodically audit the programs to benchmark against specified requirements. - Lecturers and their students may deliberate on various components and percentage of the course work as long as the percentage allocated for the coursework (e.g.: 60 – 100%) meets the guideline provided by CADe. Programs with program standard or accredited by professional bodies must follow the guidelines of their respective program standards. UPM has taken a proactive effort to review the assessment via the initiative of UPM Academic Transformation. The initiative has published a playbook entitled PrAise: Putra Alternative Assessment (2019). This playbook is published to establish awareness and understanding among UPM academic staff about the current direction of assessment methods in education. PrAise: Putra Alternative Assessment (2019) promotes alternative assessment which recognizes holistic ways in measuring the attainment	**Appendix 2.2.6 a** *Prosedur Penyediaan, Pelaksanaan dan Pengendalian Penilaian* UPM/PU/PS/P009 **Appendix 2.2.6 b** *Prosedur Pengendalian Pelajar Bermasalah* UPM/PU/PS/P013

	Supporting Document
of learning outcomes. Alternative Assessment aims to transform the assessment of student-learning outcomes which incorporates best practices in the disciplines. PrAise: Putra Alternative Assessment refers to various methods of assessment which move away from the traditional pen and paper-based examination or test. It also emphasizes on student's competency which is assessed through various methods of assessments. **(Figure 2.2.6).** The implementation of PrAise: Putra Alternative Assessment enables students to have better control of their learning experience, gauge and improve their performances to produce Future-Proof graduates. By and large, alternative assessments have been practiced in UPM in line with the implementation of Outcome-based Education (OBE). Assessment is divided into two components, i.e. Continuous Assessment and Final Examination. The ratios of continuous assessment to final assessment are 60:40, 70:30, 50:50, 80:20 and 100:0 (subject to programme standards). The alternative assessments are implemented in the component of continuous assessments. In terms of implementation, alternative assessment including e-Assessment has been fully implemented during the First and Second Semester 2019/2020. In an effort to guide its implementation, CADe has published a guidebook entitled UPM Virtual Classroom and e-Assessment Guidelines (2020), which specifically provides guidance on the implementation of virtual classroom and e-assessment. **(Appendix 2.2.6 c)**	**Appendix 2.2.6 c** Example of alternative assessment by courses (PutraBLAST) **Refer to the link :** UPM Virtual Classroom and E-Assessment Guidelines

Figure 2.2.6: Types of Alternative Assessment

		Supporting Document
(d)	**Constructive Alignment**	

UPM teaching plan is developed based on the principles of constructive alignment to ensure learning activities as well as assessment tasks are aligned to the intended learning. These activities provide students with vast learning experiences (2.2.7).

2.2.7	**The curriculum structure, content, delivery and assessment must be aligned to the learning outcomes and reviewed periodically to ensure effectiveness**	
	Our curriculum structure follows the standards by professional bodies and MQA. Since 2012, the course learning outcomes (COs) have been mapped to the identified program learning outcomes (POs). For each course, the teaching plan is developed based on the principles of constructive alignment to ensure learning activities as well as assessment tasks are aligned to the intended learning outcomes. The teaching and assessment plans are submitted in the eSMP and verified by the Head of Department to ensure the alignment of CLO with the assessment method and delivery. In achieving the PLOs for each program, a variety of teaching activities and assessment methods are being practiced. These activities provide students with vast learning experiences. The examples of the teaching activities and assessment methods can be referred to **Appendix 2.2.7 a.**	**Appendix 2.2.7 a** **Refer to 2.2.6 c** Example of Alternative Assessment courses (PutraBLAST)
	The individual PO of each course is considered achieved if 50% of the students obtained at least 50% marks (equivalent to Grade C). However, effective from Semester 1, 2017/2018, the Senate has increased the criteria for PLO attainment to 60% of students who passed with at least 50% marks. This is a way to raise the standard and to indicate a continuous quality improvement.	
	The Course Assessment Mark (CAM) for each PO is also available in the eSMP to allow for monitoring of PO attainment of each student. The information from CAM is used in preparing the Course Assessment Summary (CAS) which is submitted to the Head of Department via PutraOBE. The Head of Department compiles CASs to generate the accumulated CAS (ACAS) for all courses and the evaluation of the attainment is done in the Program Outcome Summary Evaluation (POSE). There are strategies proposed to improve the effectiveness of the program as part of the CQI. The reports of the PO attainment for each cohort are presented in a special JKKU meeting by the Dean (refer to **Appendix 2.2.7 b, 2.2.7 c and 2.2.7 d).**	**Appendix 2.2.7 b** Minute of JKKU Meeting on sample CAS and POSE (271.03) **Appendix 2.2.7 c** Minute of JKKU Meeting 276.02 **Appendix 2.2.7 d** Sample of Forms and Report of PO, CAS and POSE
	The earlier version of POSE was able to generate PO attainment reports for the cohort and there has been a progressive effort towards individual student reporting.	

	Supporting Document
In order to assist lecturers in developing assessment for all outcomes, CADe is improving the previous guidelines on 'Assessment of Teaching' to include assessment for PEOs and PLOs. The previous guidelines only contained information on the assessment of CLOs. For the graduate programmes, the process of ensuring constructive alignment can be determined from the information provided by lecturers in the OBE-iGIMS 2.0 system. The system is expected to be fully operational in Q4 2020, which also includes CAS, ACAS and POSE.	

2.3 ADMISSION AND MOBILITY
(a) Student Selection and Admission

In support of access and equity in education, UPM also makes special provisions to the enrolled disabled students **(2.3.1).**

2.3.1	**The HEP must have published policy, criteria, and processes of student selection, admission and appeal, including transfer and exchange students as well as those with special needs which are regularly reviewed.**
	
	Admission
	
	Section 22 of UPM Constitution grants the Senate the power to determine the qualifications required for admission into any program of studies provided in, by, or from the University. Admission policies are based on the requirements of the program as determined by the Faculty, or by the regulatory body of the profession. Apart from academic merit, in choosing the best candidates, some programs may impose additional requirements such as aptitude test, interview session, physical test and drawing as approved by the Senate such as:
	    (a) applicants for all Bachelor of Education programs must also pass the Malaysia Educators Selection Inventory (MedSI) and interview while the Bachelor of Education (Physical Education) applicants are required to pass a physical test as the additional requirement;
	    (b) applicants for programs offered by the Faculty of Landscape and Design must pass a drawing test and interview whereas applicants for Bachelor of Music (Music Presentation) must pass an interview and audition;
	    (c) applicants for Master of Education in certain fields such as Guidance and Counselling, TESL, Master of Landscape Architecture and Master of Architecture are also subjected for interview.	

	Supporting Document

The University adheres to the UPU meritocracy policy for the purpose of ensuring transparency regarding admission at the undergraduate level. In addition, interview criteria (specific guidelines and scoring sheets) are established by the respective faculties based on the needs of the programs.

Admission for Undergraduate Studies

The admission requirements for undergraduate studies shall be tabled to and approved by the Senate annually prior to the submission to the Electronic Management of Admission System (e-MAS), Ministry of Education Malaysia. It is a database for all local student admissions of all public universities in Malaysia. The admission requirements have also been made accessible to the public in the UPM website via www.esmp.upm.edu.my/promosi. The local admissions are coordinated nation-wide by the Ministry of Education Malaysia for applicants with STPM, matriculation, and diploma qualifications; therefore, the admission requirements are also published in the Ministry of Education's website via www.moe.gov.my. In addition to these qualifications, UPM has an in-house admission selection processes for candidates of the Foundation Studies for Agricultural Science and those with UPM's diploma qualifications.

In general, local students who have been accepted are of high quality because of the stiff competition to secure admission. This is evident by the fact that more than 70% of students registered as new students for September 2018/2019 are those with a CGPA of 3.000 or higher.

All international student admission to undergraduate programmes are also processed in-house by the Admission Division and respective faculties in UPM. International candidates who meet the admission requirements but do not meet the required English proficiency may enrol in the Certified Intensive English Programme conducted by ELS. ELS collaborates with UPM to prepare the international students to fulfil the proficiency level as required by their programme of studies. Currently, international candidates who apply for undergraduate programme in the fields other than English Studies or TESL must obtain a TOEFL with a minimum score 500 or IELTS with a minimum Band 5.5 or equivalent in order to be qualified for a full admission. A candidate from a native English-speaking country or who has undergone education that used English as a medium of instruction may be exempted from the English requirement criteria as determined by the University. Exemptions can be processed if applicants provide the evidence which will be screened and endorsed by the Admission Division **(Appendix 2.3.1 a)**. The University regularly refers to the list of recognized qualifications

Appendix 2.3.1 a
Example of Evidence Screened and Endorsed by Admission Division

	Supporting Document
for foreign candidates issued by MQA when considering applicants for admission. UPM honours the collective decision made by all public universities and the Ministry of Education regarding local student admission in which students who have already been offered a placement cannot be counter offered by another institution. Since the beginning of the 2018/2019 academic session, UPM has not entertained any appeals from candidates who have received admission offers from other public universities. However, a special consideration may be given to candidates on a case-by-case basis, with the consent of the public University that has initially offered them an admission. The data of local admission to undergraduate studies, particularly the admission that is coordinated by the Ministry of Education, is presented to the Senate annually. A special attention is given to the percentage of applicants who have applied for UPM academic programmes as their first choice and the percentage of candidates with CGPA of 3.00 and above who registered as UPM students. Attention is also given to academic programmes which may be listed as 'Unpopular Programme'. The 'Unpopular Programme' refers to a programme that has received less than 100 applications regardless of the rank of choices (**Appendix 2.3.1 b).** For the past four years, none of UPM programmes is listed under 'Unpopular Programme'. A programme is shelved only if it is listed as unpopular for three consecutive years. The Senate agreed that any programme which has been listed in the 'Unpopular Programme' for three consecutive years and failed to achieve at least 75% of Graduate Employability (KPI that was set for the programme) shall be shelved from admitting new students. The Senate further agreed that a corrective action shall be taken on any programmes that are listed in the 'Unpopular Programme' so that it will be more competitive, and hopefully, will be removed from the list in the following year. Since the local admission for undergraduate studies is coordinated by the Ministry of Education, appellants can file their appeals online to the Ministry of Education within the stipulated period determined by the Ministry. The University shall then confirm the number of places available in the program to the Ministry. After the appeal process via the Ministry of Education is completed, UPM may consider the appeal for admission, on case-by-case basis, subject to the availability of seats and qualification of appellants. For international candidates, consideration of admission shall be based on the applicants' choices. If the application for the first programme chosen is unsuccessful, the next choices of programme applied by the candidate will be considered by the relevant faculties.	 **Appendix 2.3.1 b** Minute of Senate Meeting 629.02 on Unpopular Program

		Supporting Document
	Even though the admission selection is made on meritocracy basis, UPM reserves up to 100 placements for admission to undergraduate studies, as part of the CSR initiatives, to candidates from Bottom 40 percent (B40) household income group who have met the minimum requirement of admission but failed to get admission into the mainstream. However, the admission of B40 candidates is limited to non-competitive programmes which do not require an interview session or additional requirements for admission (refer to **Appendix 2.3.1 c).** Programmes that are listed under competitive programmes by the Ministry of Education are Pharmacy, Medicine, and Dentistry. Under this provision, it is hoped that after their completion of studies, the students can contribute to the betterment of their families. UPM also offers a Preparatory Diploma in Science Programme at UPM Kampus Bintulu (UPMKB). This programme can be regarded as a 'bridging programme' to provide students from rural areas especially from Sarawak and Sabah, who possess SPM or equivalent qualifications but do not fulfil the full admission criteria for a diploma programme, the opportunity to equip themselves with basic science knowledge to pursue in diploma programmes afterwards. Upon completion, students can apply for diploma programmes in UPMKB such as Agriculture, Fisheries, Forestry, Food Estate Management, Animal Health and Production, Agricultural Engineering, and Agribusiness. Although MQA has established a clear policy on admission based on Accreditation of Prior Experiential Learning (APEL), UPM has yet to fully utilize this avenue. Thus far, there was only one undergraduate student who was admitted with APEL (A) in a distant learning programme. Consideration for the APEL (A) pathway is not necessary at the moment since UPM has consistently exceeded the number of candidates with excellent qualifications competing for University admission. **Admission for Postgraduate Studies** At the postgraduate level, the admission criteria is determined by the faculty/institute, endorsed by the University Graduate Studies Committee and approved by the Senate. Applicants can submit their applications via the Internet-based Graduate Information Management System (iGIMS) and are able to track their application status through the system. Any changes in admission requirements, subject to the Senate approval, are made accessible to the public via the UPM School of Graduate	<u>**Appendix 2.3.1 c**</u> Minute of JPT Meeting *Panduan Program Pengajian lepasan STPM/ Setaraf kali ke-67*

	Supporting Document
Studies website. Details of the admission criteria and procedures for all postgraduate programmes are described in brochures and the UPM School of Graduate Studies website via http://www.sgs.upm.edu.my/prospective_students-2964 A candidate who is working may apply for a part-time study in the postgraduate programme by research mode with the recommendation from his/her employer. The candidates will be given additional two semesters to complete their studies. This flexibility is only exclusive for local candidates. **(Appendix 2.3.1 d).** Essentially, international applicants must obtain a minimum score of 550 for the TOEFL Paper-based Test (Academic Version); or Band 6.0 for IELTS (Academic Training) ; or 79-80 for TOEFL Internet-based Test (Academic Version); or Level 109 for CIEP at ELS Language Centre; or Band 4.0 for IELTS (Academic Training) or 400 for the TOEFL Paper-based Test (Academic Version); or any English Language Test which is equivalent to B2 in Common European Framework of Reference for Languages (CEFR) for the admission to Malay Language Studies, Arabic, Chinese Literature programme or any other programmes that allow a thesis to be written in the language of instruction. Other criteria include ; applicants who have graduated from Public or Private Institutions in Malaysia which is recognized by MQA; or applicants who have undergone their Bachelor's degree or Master's degree from the Institution of Higher Learning in Native English Speaking Countries; or applicants from any native English- speaking countries and Commonwealth countries **(Appendix 2.3.1 e).** However, a provisional admission can be granted to applicants who have not fulfilled the English requirement on the following conditions: (a) A candidate with TOEFL score 500 – 549 or equivalent shall enrol in the Postgraduate Intensive English Programme (PIE) 2 offered by Centre for the Advancement of Language Competence (CALC) concurrently with his/her postgraduate programme; (b) A candidate with TOEFL score 450 – 499 or equivalent shall enrol in PIE 1 offered by CALC prior to the enrolment of PIE 2 and his/her postgraduate programme; and (c) A candidate who has not taken a TOEFL/IELTS test in his/her own country or who has TOEFL score less than 450 or equivalent is advised to enrol in the Certified Intensive English Programme (CIEP) and pass with Level 107 prior to the enrolment in PIE 2 and their postgraduate programmes. A candidate who has passed with Level 109 shall have a full admission to a postgraduate programme.	**Appendix 2.3.1 d** Refer to Appendix 2.2.7 UPM (Graduate Studies) Rules 2003 (Revision 2015-2016) **Appendix 2.3.1 e** *Pematuhan kepada Panduan Kemasukan ke Universiti Awam*

	Supporting Document

International candidates from native English-speaking countries or those who have undergone education in places that use English as medium of instruction may be exempted from English requirements as determined by the University but subjected to any other requirements as specified by the advisor/supervisor/programme coordinator. For international student admissions, the School of Graduate Studies seeks verification from the applicant's university or Embassy to ensure the authenticity of the degree, if need arises.

Should the candidate fail in securing a place for admission due to various reasons such as unavailability of suitable supervisor or unsuitability of field of studies proposed, the application may be referred by School of Graduate Studies to other faculties or programmes for consideration.

Admission requirements for all Master by Coursework programmes shall at least be reviewed during curriculum review exercise every five years based on MQA requirement. Data on admission in postgraduate studies has to be reported to the Senate commencing academic year 2018/2019.

Opportunity for Disabled Student to Further Study

In support of access and equity in education, UPM does not discriminate against applicants with disabilities except those with total blindness, deaf or mute as UPM has no facilities (such as braille) to accommodate their learning needs. However, UPM cannot accept a disabled candidate if his/her disability will hinder him/her from being fully involved in the learning activities that are required. For instance, a candidate with amputated leg and arm will not be accepted in the Bachelor of Forestry or Bachelor of Agriculture programs as these programs require a lot of field work. However, basic facilities such as special toilets and ramps for wheel-chaired students are provided in all faculty premises and residential colleges.

UPM makes special provisions to enrolled disabled students. For example, the Division of Student Affairs, UPM provides special transport to ferry disabled students from residential colleges to faculties every day to attend classes/activities. In the 2018/2019 admission, UPM has allowed a mother of a disabled student to stay together with her daughter in the residential college to assist her daughter's mobility on campus. The admission of an international student with disability reflects UPM's care and concern in giving opportunities to students with disability to further their study. A limbless disabled student successfully graduated and received a degree in Master of Software Engineering at the UPM Convocation Ceremony 2018.

	Supporting Document
Accommodation for International Student UPM provides accommodation on campus for international students. However, they are given the option to stay on or off campus. UPM provides assistance for them to get off campus accommodation by inviting providers to open up booths during registration week of new international students. UPM also provides buses to ferry students every day at selected locations to campus with a minimal fee of RM15 per month. The transportation schedule can be downloaded by student via Putrabus Apps. **Change of programme** **Undergraduate Studies** Rule 70 of Universiti Putra Malaysia (Academic Matters for Undergraduates) and Rules 2014 provide opportunity for students to change their programme whether the change involves inter-faculty or from another University to UPM. The change of programme can only be considered if the current faculty has no objection to the change, and the new faculty has consented to accept the student upon condition that he/she has completed at least two semesters of studies. In considering the change, the new faculty has to consider several conditions such as available places in the programme, the suitability of the applicant and the reasons for change. All students regardless of their status whether Good Standing, Warning or Probation status, are eligible to apply for change of programme as long as their status is not Terminated. Administratively, application for a change of programme from other universities is handled more strictly, and so far, the University will not consider a student with other than Good Standing status for change of programme. As stipulated in Rule 70, students with Good Standing status and have been accepted for change of programme are eligible to apply for credit transfer. The credit including grade and point, shall be transferred to the new programme of studies. However, students can opt not to transfer the credit and instead, choose to repeat the course in the new programme of studies. Furthermore, a student with the status of Warning or Probation but has been accepted for a change of programme shall not receive credit transfer/exemption regardless of the grade that he/she has obtained for such course. Detailed process for credit transfer including for mobility students is explained in the next section.	

		Supporting Document
	Postgraduate Studies A postgraduate student may apply for change of programme/fields of study in accordance with Rule 27, Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2015 - 2016). The application may be submitted any time during the semester. If approved within the first seven (7) weeks of the semester, the transfer shall take immediate effect. Otherwise, the transfer shall take effect in the following semester. If a student whose application for transfer from a programme by research to a programme by coursework (with credit fee) is successful, he/she shall be required to pay credit fees for all courses including those courses that have already been taken prior to the transfer. A student may apply for credit transfer during the transfer as provided under Rule 11. A transfer is allowed only once unless there is endorsement by the University Graduate Studies Committee or its equivalent. Application for credit transfer after two (2) semesters of study will not be considered unless under special circumstances and with the endorsement of the University Graduate Studies Committee or its equivalent. A credit transfer of graduate level course may be considered on the following conditions: (a) the courses are relevant to his/her programme of study; (b) the equivalent courses to be transferred shall at least be a grade B or 65%; (c) the total credit that may be transferred shall not be more than 30% of the total credit required by the programme; (d) the courses to be transferred were taken in not more than five years before the date of his/her registration at the University; (e) the credit transfer shall be approved by the Faculty/Institute/School; and (f) the application for credit transfer shall be made in the first semester. **Exchange Student/Inbound Mobility** UPM encourages students to gain international experience via mobility or exchange programmes as well as study visit and/or industrial training. Other forms of student mobility include clinical training, practicum or placement programmes, internship programmes, short-term courses and language programmes. Postgraduate students are also encouraged to participate in seminars/conferences/workshops. Student mobility programmes have also become one of the important agendas for UPM, particularly in improving UPM ranking in QS Asia. These activities are mainly undertaken with universities	

	Supporting Document
that have signed MoUs with UPM. These exchanges and transfers are coordinated by Putra International Centre. In encouraging student mobility, UPM recognises course credits obtained at host institutions, provided the course taken has an equivalent credit value and must have at least 80 percent similarity with the course outcomes to the course that will be given exemption at UPM. For the students involved, the University also allows them to have a short (third) semester, so that they are able to complete their studies within the duration of sponsorship and do not have to extend their semester, thus can graduate on time. The University allocates approximately RM 180,000 to RM 200,000 per year to facilitate cross-border student mobility via student exchange programmes. The fund serves as financial assistance and is used for expenses such as airfare and pocket money for outbound students. The fund provides two types of outbound mobility programmes which are for short term travel and long-term travel. Besides the mobility fund being allocated internally, the University also solicits/bids sponsorship or scholarships. So far, UPM has secured several projects for outbound mobility students such as Erasmus Mundus, Mevlana and ASEAN International Mobility Students (AIMS). These projects provide scholarships or financial assistance for students to study abroad for a minimum of 1 (one) semester. For the long-term mobility programme, only students with CGPA 3.000 and above shall be considered for financial assistance/scholarship. Those with lower CGPA are allowed to participate in short-term mobility, but they will have to self-finance their way. All mobility/exchange students information and opportunities are made known to the students through Putra International website and also through Mobility Coordinator appointed by each faculty. UPM also believes that the presence of international students will provide a 'global atmosphere' at the University. Therefore, apart from collaboration in reciprocal students exchange programmes, the University also facilitates its own outbound or inbound student programmes. For inbound students, UPM has collaborated with international agencies/counterparts such as Asia Exchange, who bring inbound students from Europe to enrol as non-graduating students at UPM. The collaboration started in 1st Semester 2013/2014, and a year after that, the University started to receive an encouraging number of mobility students from Europe under the Asia Exchange initiative.	

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(b)		**Mobility, Articulation and Credit Transfer**	
		UPM policies, regulations and processes covering student mobility, articulation, credit transfer and programme transfer provide greater flexibility as well as promote lifelong learning. (2.3.2)	
2.3.2		**The HEP must regularly review and publish policies, regulations and processes covering student mobility, articulation, credit transfer and programme transfer within or across institutions recognising formal, informal and non-formal learning.** **Policies and Mechanisms to Facilitate Student Mobility, Exchange and Transfer** In encouraging students to go for outbound mobility, the Senate has revised the regulation pertaining to credit transfer whereby a student may transfer his/her credit together with the grade he/she has obtained at the host institution subject to the criteria for credit transfer. **(Appendix 2.3.2 a)** A student who participates in an outbound mobility programme may face difficulties in obtaining sufficient credits to be transferred to the programme at the home institution and thus, this may affect his/her opportunity to complete his/her studies on time. Therefore, UPM allows the student to enrol for the Third Semester (short semester) that consists of 7-week lecture and 1-week examination, so that the student could complete his/her studies as planned. Furthermore, in designing and developing a programme of studies, faculty is allowed to accommodate six credits of open electives which can be taken from within or outside the university. This would help an outbound mobility student to obtain more credit transfer. See *Panduan Penyediaan Dokumen Program Pengajian Edisi 2016* as approved by *JK Kurikulum Universiti* (Minute 257, 1st July 2016) and endorsed by the Senate (Minute 623.27, 18th August 2016). Policies and mechanisms for student mobility and the KPI for inbound and outbound students are under the purview of the Deputy Vice Chancellor (Academic and International). UPM allocates special fund to support student mobility programmes. The challenges of student mobility are not only on the provision of financial support and university network internationally, but also the ability to change students'	<u>Appendix 2.3.2 a</u> Minute of Senate Meeting 638.03

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mind set on their readiness to study abroad especially for long term mobility such as one semester. Mobility programmes have two prolong benefits. For individual students, they will benefit in their personal development, social skills, and labour market returns. While for the university which receives and sends a significant number of students, the success of mobility programmes marks the prestige and quality education offered by the university and recognition from their counterparts. The number of inbound and outbound mobility students have become one of UPM Annual KPI because student exchange is one of the criteria for QS Asia University Ranking. UPM has experienced an increasing trend in mobility students in the past five years. For instance, there were 1,256 inbound students in 2014 followed by 1307 (2015) and 1698 (2016). However, in 2017, there was a drop of inbound students with 1190. For outbound students, 727 students went abroad in 2014, followed by 1221 (2015), 1141 (2016) and 1546 (2017). UPM targeted 1700 inbound students and 1600 outbound students for the 2018 and 2019 KPI. **(Appendix 2.3.2 b)** In the last five years, UPM, through the University Student Mobility Committee, has regularly reviewed and published policies on mobility students to ensure that the decisions made are supported by the initiatives. For instance, the University Student Mobility Committee had approved a Guideline on Financial Assistance for Outbound Mobility Program on 12th June 2017. Furthermore, the same committee had revised and amended the guidelines on 8th March 2017. The guidelines cover what kind of mobility and type of financial assistance that are available for students. **(Appendix 2.3.2 c)** While it has been a long-standing approach for the University Student Mobility Committee to provide financial support only to a small group of students for outbound mobility, the committee had changed its approach by supporting larger group of students to study abroad for two weeks on 14th July 2018. One of the considerations for this change is because the committee foresees the difficulties in achieving outbound students as targeted for 2018. A group consisting of 20 students with each of them possessing a minimum CGPA of 2.750 are eligible to apply for financial assistance amounting to RM10,000. The Committee envisaged that this new approach will support the initiative to achieve the KPI for outbound students.	**Appendix 2.3.2 b** Data on Inbound and Outbound Mobility and KPI for 2019 and 2020 **Appendix 2.3.2 c** Minute of Student Mobility Meeting 64 and Guideline on Financial Assistance for Outbound Mobility Program

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The presence of inbound students apparently is more difficult to control because it depends on the willingness of other universities to send their students to UPM. Nevertheless, the University realised that the existence of attractive programmes particularly under Summer School could bring more students to UPM, and therefore, the University encourages all faculties and CALC to design and offer Summer School Programmes to penetrate the international market. Besides increasing the number of inbound students, these programmes are also aimed at generating income for the University. As of January 2018, it was reported to the University Student Mobility Committee that 19 Summer School Programmes were ready to be offered by faculties and Centre for the Advancement of Language Competence (CALC).

Mobility for Postgraduate Students

For international postgraduate students from universities/ research institutions overseas, Inbound Research Attachment and Inbound Mobility programmes provide opportunities for students to experience academic learning at UPM. For Inbound Research Attachment, students can apply for a short-term research attachment at any faculty or research institution in UPM while for Inbound Mobility, students can enrol in graduate courses or pay a short visit to UPM. All students intending to join the programmes must register with the School of Graduate Studies (SGS). UPM will charge all inbound students a standard fee to cover library, medical and service charges. For the Inbound Research Attachment students, the receiving faculties / research institutions may charge additional bench fees while students who enrol in courses under the Inbound Mobility are charged credit fees.

Students who enrol as members or associate members of the Southeast Asia Consortium of Graduate Schools may cross-enrol with UPM at their own expenses. No tuition fee shall be charged if students are already paying fees at home universities. However, students are required to pay a standard fee that covers library, medical and service charges.

UPM, in its effort to promote postgraduate outbound mobility, provides financial assistance to students intending to do research attachment at universities/ research institutions overseas and present (oral) research work at international seminar/conference/symposium. A selection committee vets all the students' applications based on the respective application requirements. The amount awarded to eligible students vary according to the countries that they visit i.e. Southeast Asia, Asia (including Singapore and Brunei) and others.

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Besides the opportunity to do research attachment at overseas research facilities and present research work at international seminar/conference/symposium, students are also able to experience academic learning at overseas universities through International Collaborative Programs (ICP). At present, UPM offers Split/Jointly awarded and Dual/Cotutelle degree programmes with various universities in United Kingdom, Canada, Australia, France, Japan, Thailand and others. Students who register under these programmes are required to conduct part of their research and/or enrol in several courses at the collaborating universities/research institutions for certain duration as specified by the programmes. Since 2015, UPM has received a total of 411 (2015), 430 (2016), 26 (2017), 109 (2018 – Sept) students for the postgraduate inbound mobility programme. For postgraduate outbound mobility programme that includes research attachment, oral presentation at international seminar / conference / symposium and ICP, the total is 217 (2015), 145 (2016), 106 (2017), 87 (2018 – Sept). **Articulation and Credit Transfer Provision for Undergraduate Studies** The University reckons that students who undergo a mobility programme abroad for at least one semester, may find difficulties in matching the equivalent course according to MQA policy for credit transfer. Hence, this will result in them not having enough credit transfer which could delay their graduation on time. Therefore, the University has made a general ruling that all programme reviews should consider allocating at least six credits for open electives to facilitate mobility students to obtain sufficient credit transfer. This would encourage students to go for mobility abroad, so they could gain global exposure and build up their confidence and soft skills. **(Appendix 2.3.2 d)** The policies, regulations and processes of credit transfer are articulated in the Second Schedule of Universiti Putra Malaysia Rules (Academic Matters for Undergraduates) (Amendment) (2016). The amendment was made to ensure the provision of credit transfer is in accordance with the credit transfer policy prescribed by MQA. The latest change was made by the UPM Senate on 21st July 2016. At the undergraduate level, the credit transfer for mobility students is treated similar to the credit transfer for students who transfer from other programme be it vertical or horizontal transfer. The credit transfer for equivalent	<u>**Appendix 2.3.2 d**</u> Minute of Senate Meeting 622.08

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course to a bachelor's programme of studies shall be considered under the following conditions:

(a) A course is accepted for credit transfer provided that a grade C+ or higher was achieved and the content of the course have at least 80% similarity to the 'equivalent' course offered in the student's study programme.

(b) The credit hour of a transferred course must carry at least the same credit hour of the course in the student's study programme.

(c) The maximum credit that can be granted for credit transfer is 30% for a transfer from diploma to bachelor studies and 50% from bachelor to bachelor studies.

A minimum of grade C is also required for the same course to be transferred as opposed to grade D in the past as UPM has set grade C as the minimum indicator for students to achieve a course outcome. However, several faculties set higher requirements such as grade B as the minimum requirement.

A credit transfer shall only be considered based on a course-by-course basis instead of the overall programme's cumulative grade point average. Details of credit transfer provision is explained in the Second Schedule of Universiti Putra Malaysia Rules (Academic Matters for Undergraduates) (Amendment) (2016).

A student who has successfully undergone a mobility programme may apply for a credit transfer subject to the above conditions (a) and (b). In view of these conditions, UPM foresees that students may face difficulty to register sufficient credits that can be transferred to UPM from the host institution. Hence, in encouraging participation in outbound mobility programme, UPM has provided a provision of offering Third Semester or also known as Short Semester to students who are involved in outbound mobility programme so that they can register for relevant courses and complete their studies on time.

Credit transfer of a course from a programme in UPM to another shall be approved by the Dean who offers the course whereas credit transfer of a course from programme of studies offered by other universities to UPM programme of studies can only be approved by the Academic Equivalency Committee which is one of the Senate Standing Committee.

The Academic Equivalency Evaluation Committee was formed by the Senate to deliberate and evaluate application for credit exemptions. The terms of reference of the committee are as follows:

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(a) To deliberate and consider the equivalency of course/ industrial training/internship of UPM programmes with other institutions in Malaysia or abroad; (b) To determine the equivalency of grade for a course offered by UPM with other course grade of other institutions either in Malaysia or abroad; and (c) To evaluate the equivalency of Certificate/Diploma/ Degree offered by other institutions with programmes offered by UPM **Articulation and Credit Transfer Provision for Postgraduate Studies** At the postgraduate level, a student who changes his/her study programme or field of study may apply for course exemption. The provisions of Rule 11 of Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) state that the student must adhere to the following: • Courses are relevant to the programme of study; • Credits to be exempted shall be for courses that are equivalent to those courses offered at the University and shall be of a minimum of grade 'B' or 65 percent and above; • Courses were undertaken within five years from the date of his/her registration at the University; • Total number of credits exempted shall not exceed 30 percent of the total credit requirement for a full-time programme; and Exemption of courses shall be approved by the Dean of the School of Graduate Studies. **Programme Transfer for Undergraduate Studies** The transfer of undergraduate students to another programme is based on the rules in Section F, Programme of Study, Rule 66, Universiti Putra Malaysia Rules (Academic) 2003 Amendment 2005. The Senate decided to maintain this provision under the Universiti Putra Malaysia (Academic Matters for Undergraduates) Rules 2014. Students are allowed to apply for programme transfer after completing the first two semesters of study. Application for transfer must be made using a specific online form available in the eSMP. The application form must be submitted within two weeks after the examination results of the first year are released. The final decision is made by	

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	the dean of the faculty (for programmes within the same faculty) or deans of the relevant faculties (inter faculty transfer). The Academic Division informs the applicant of the outcome within the first week of the following semester. In addition, the students must be in good standing status and have obtained a CGPA of at least 2.0. Students on 'Warning' or 'Probation' status are allowed to apply for a transfer of programme without any course exemptions and are regarded as new students insofar as the new programme is concerned. **Program Transfer for Postgraduate Studies** The transfer of postgraduate students to another programme or field of study is based on the rules in Rule 27 of Universiti Putra Malaysia Rules (Graduate Studies) 2003 (Revision 2012-2013). Students are allowed to apply for transfer in the first two semesters of their study. Application for transfer can be done online in the student portal (iGIMS). Newly registered postgraduate students may apply for a transfer of programme or field of study not later than the second week of the first semester. A continuing student may apply for a transfer from a programme or field of study not later than the tenth week of the second semester. If approved, the transfer takes effect in the following semester. An application for a transfer that is made within the first two semesters is subject to the approval of the Dean of the School of Graduate Studies. Any application for transfer made after two semesters of study is not generally accepted unless it has gained the approval of the University Graduate Studies Committee. The transfer of programme or field of study is allowed only once. Students whose applications for transfer are approved may apply for course exemption, if relevant. **Recognition on Non-Formal Studies** The Senate had adopted the MQA circular on 7th June 2018 which recognises and considers previous learning experience for credit transfer. Earlier, the Senate, on 12th April 2018, in line with recognising students' work experiences, had agreed to provide options for part time students whether to undergo Industrial Training by completing the training at their workplace or by taking a project or a course that carry the same credit load with the Industrial Training. This would help part timers to comply with curriculum requirements and promote lifelong learning **(Appendix 2.3.2 e).**	**Appendix 2.3.2 e** Minute of Senate Meeting 647.15

SELF REVIEW REPORT: AREA 2

STRENGTHS

1. Currently UPM offers 160 programmes and many new programmes have been approved by JKPT and will be offered in the coming semesters. These new programmes were developed to meet the current needs of the industry.

2. There are extensive co-curricular activities offered by the Co-curriculum Centre that enrich students' experience and foster personal development and responsibility. Categories of courses offered are as follows:
   a) Entrepreneurship
   b) Cultural
   c) Leadership
   d) Public Speaking
   e) Volunteerism
   f) Innovation
   g) Sports
   h) Community Service

3. UPM provides various channels to enhance students' skills in language proficiency, such as:
   a) English proficiency packages such as ELEx, LPE, CEL, and LAX which are offered by the Center for the Advancement of Language Competency (CALC).
   b) 3 credit hours of foreign language course that is compulsory for students.

4. UPM Academic Transformation is a synergised initiative to redesign the curriculum structure, innovate teaching and learning delivery methods, as well as diversify assessment methods to ensure Future-Proof PUTRA Graduates through:
   a) PutraFlex – UPM flexible curriculum: Redesign the curriculum structure
   b) PrIDe – Putra InnoCreative Delivery
   c) PrAiSe – Putra Alternative Assessment

5. The Future-Proof PUTRA Graduate initiative ensures UPM graduates equip themselves with various skills through meaningful learning experience in a collaborative and cooperative learning environment. Ultimately, UPM graduates are aimed to acquire these skills:
   a) Critical and problem solving
   b) Citizenship
   c) Collaborative
   d) Character
   e) Communication
   f) Creative

6. UPM incorporates *Pembelajaran Teradun Gantian* (PTG) which allows flexibility in learning where students are immersed in virtual learning environment that provides access to learning at any time and place. This constitutes 30% – 50% of total credit hour of the courses that opt for PTG.

7. Currently, UPM extends its international collaborative programmes with 13 active partner universities, including University of Newcastle, Australia; University of Alberta, Canada; Maejo University, Thailand; Kasetsart University, Thailand; Prince of Songkla University, Thailand; Wollongong University, Australia; University of Science and Culture, Iran; and University of Paris 1 Pantheon-Sorbonne, France. Several other international collaborative programmes are being explored.

8. PutraBlast, a portal used by lecturers and students as an information structure management and delivery of learning contents, allows lecturers to conduct evaluation, progress tracking and monitoring of the learning process. The updated PutraBlast was introduced in 2020 which includes new features such as:
   a) Styling
   b) Dashboard
   c) Social learning
   d) Interesting interface
   e) Gamification and competency-based learning
   f) Customizable layout
   g) Track progress
   h) Personalized learning
   i) Mobile friendly

9. All programmes are continually reviewed and evaluated based on various standards of MQA-COPPA guidelines and, systematically managed through QMS ISO 9001:2008, ISMS ISO 27001 and EMS ISO 14001.

10. Conducive learning environments are provided to nurture and encourage learning and foster creative achievements among students through full utilization and improvement of existing spaces, landscapes and infrastructures such as farms, teaching hospital, Sultan Idris Shah Forest Education Center (SISFEC), Putra FM, Taman Pertanian Universiti (TPU), and companies that are set up on UPM campus such as Farm Fresh (FP), and Shimadzu (FS).

11. Extensive and comprehensive monitoring of curriculum development through several committees, namely JKKK (technical aspects of course contents and mapping of POs), JKKU (evaluate PEO and curriculum design) and Senate (evaluate the implications of the program to UPM). This is to ensure the quality of University programmes in terms of knowledge, skills, and competitiveness of the graduates.

12. UPM establishes extensive linkages with all external stakeholders at various levels for programme planning, implementing and reviewing of its programmes. Feedback from the employers is gathered and utilized for curriculum improvement for student placement and workplace exposure. UPM also strongly facilitates its students to develop linkages with external stakeholders.

13. PRT2009 (Agriculture and Life) strengthens the need of an agricultural-based course with elements of practical skills to enhance students' appreciation towards agriculture. This is a distinct and unique attribute of UPM graduates.

14. PutraOBE is a system that was developed in 2012 to monitor the entire process of OBE which involves the restructuring of curriculum, assessment and reporting practices to reflect the achievement of outcomes and mastery of skills rather than accumulation of course credits. It is used to assist the reporting and monitoring of OBE for each programme. The reports are generated based on the programme outcomes of each individual programme.

15. UPM offers extensive and appropriate developmental or remedial support for students who need such support. For example: WAZAN and transportation services for disabled students.

16. i-Putra provides mobility and exchange students with the information and assistance to help them learn and adapt to local culture comfortably. For example: Buddies UPM Association and International Students Association (UPMISA).

17. The registration and admission process using e-daftar has improved the registration and admission process of new students and reduce registration time to approximately 15 minutes per student.

AREAS OF CONCERN

1. Several faculties in UPM made the effort to measure their PEOs. Over time, this initiative will be extended to all other faculties. Currently, the University is formulating guidelines to measure PEO attainment. Following training on PEO assessment on 8 -9 May 2019, faculties have submitted the refinements of PEOs (if applicable) of their undergraduate programmes. Faculties are also entrusted to monitor the attainment of PEOs.

2. Wi-Fi and internet are not easily accessible in some areas in UPM campus for curriculum delivery using virtual learning.

AREAS OF IMPROVEMENT

1. SMP and PutraBlast portals frequently experience server downtime each semester due to heavy traffic usage. This disrupts course delivery and assessment.

2. A more comprehensive study on the effectiveness of Industrial Training needs to be done. Currently, every faculty solicits feedback from their respective industry partners to ensure the CQI of their programmes. UPM continuously explores opportunities for the students and strategizes on improving the marketability of its graduates.

3. UPM has a clear process for vetting of examination questions; however, the practice varies across faculties.