



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Fakulti
Kejuruteraan

FAKULTI KEJURUTERAAN
Faculty of Engineering

Welcome to
Faculty of Engineering

UTM Engineering Facts & Figures



ACTIVE STUDENT NO.

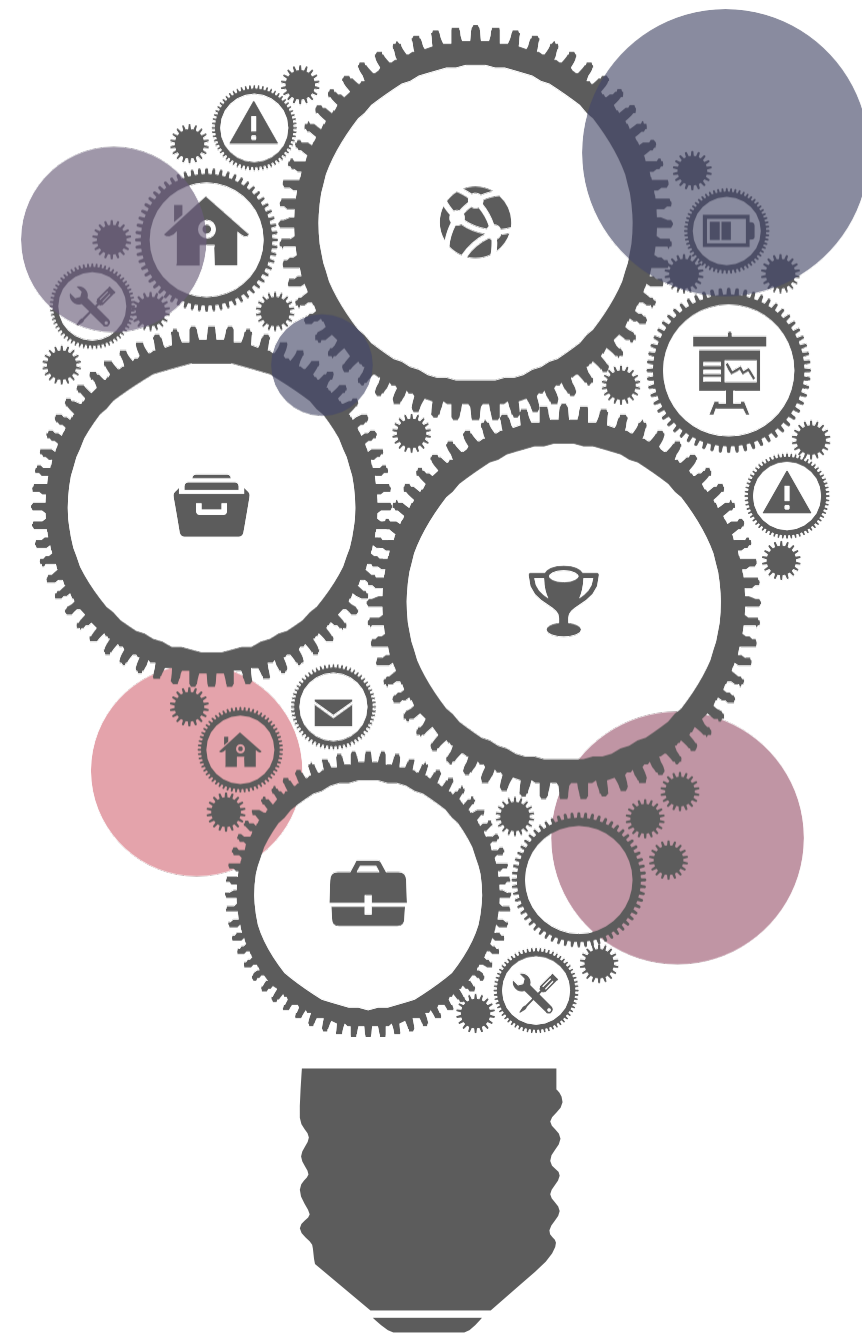
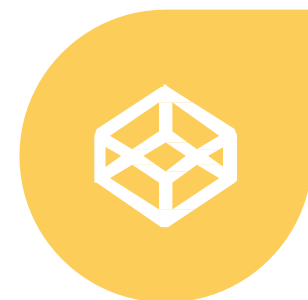
Total PG & UG student:
11,070 **Total PG student: 3,175** **Total UG student: 7,895**

Total Master Student: 1,395
Total PhD Student: 1,780
Total International Student: 868 (PG), 1,141 (UG)
Total Local PG Student: 2,307

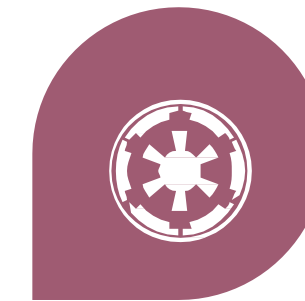
**Data as at 09.12.2019*

TOTAL CAMPUS EXPERIENCE

Outbound Mobility: 43
Inbound Mobility: 150
Non-Graduate Student: 92



REPUTATION



QS Ranking by Subjects: #85 **HiCoEs: 4**
Research Centre: 17 **Centre of Excellence: 6**
Research Group: 49
Graduate Employability: 94%

INDUSTRY LINKAGES/ BRANDING/RESEARCH ACTIVITIES



Community engagement projects: 23
Research Grant Secured: RM32,952,579.90 **Income from research & innovation: RM15,189,294.60**
Indexed publications: 1,975
Citations: 59,983

OUR VISION

To be a premier global faculty in engineering and technology

OUR MISSION

Synergizing academic capacity to nurture holistic talents and lead in innovative technologies.

Main thrusts for Synergy



Reformation of work process towards efficient administration and management of resources



To enhance team spirit and togetherness through holistic development of staff



Strengthen collaboration with other PTJs for effective and balanced implementation process



Maximize utilization of technology in line with the development of Industrial Revolution 4.0

“ These are the main thrusts that we use as our guide in ensuring successful implementation of Synergy 4.0 at UTM Engineering ”

DNA required for Synergy

“ Having a high level of intellectualism alone is not enough. It can even be counter-productive without the other two important DNAs. ”

“ We already have academics with highest accolades, but how many do we have with all three DNAs? ”





Level of cooperation will determine how fast and how far UTM Engineering will go



Consider alternatives. There is always more than one way of doing things



Right response on feedback is crucial, but quick adaptation is equally important



Tap and nurture the abilities and potential of our staff/unit



Don't make things complicated. Simplicity always work best.



NEW STRUCTURE

NEW PROCESS

“ We initially faced lots of hiccups because we used the old process in the new structure. We realized that there are certain things that just wont work within the new structure. ”



Dean

**Prof. Dato' Ir. Dr. Mohammed Rafiq
bin Dato' Abdul Kadir**



**Chair
SCEEE**
Prof. Dr. Mohd Ghazali
bin Mohd Nawawi



**Chair
SME**
Prof. Dr. Mohd
Hasbullah
bin Hj. Idris



**Chair
SCE**
Prof. Dr. Khairul
Anuar bin Kassim



**Deputy Dean
(Academic &
International)**
Prof. Dr. Ahmad
Baharuddin bin
Abd Rahman



**Deputy Dean
(Research &
Innovation)**
Prof. Dr. Naomie
binti Salim



**Deputy Dean
(Development &
Alumni)**
Prof. Dr. Sevia
Mahdaliza
binti Idrus Sutan Nameh



**Chair
SEE**
Prof. Ir. Dr. Mohd
Wazir bin Mustafa



**Chair
SC**
Prof. Dr.
Wan Mohd Nasir
bin Wan Abdul Kadir



**Chair
SBME**
Prof. Dr.
Kahar bin Osman



**Deputy Dean
(Student Affair)**
Assoc. Prof. Dr.
Roshanida
binti A. Rahman



**Assistant Dean
(Continuing &
Transnational Education)**
Prof. Dr.
Norhazilan bin Md Noor



**Assistant Dean
(Global & External
Engagement)**
Prof. Ir. Dr. Shuhaimi
bin Mansor



**Assistant Deans
(Quality & Strategy)**
Prof. Dr. Abd. Latif
bin Saleh



Senior Deputy Registrar
Asram bin Sulaiman



Deputy Registrar
Mohd Fazilah bin
Abdullah



Deputy Registrar
Azri bin Hohad



IT Manager
Siti Faridah
bte Shikh
A Rahman



Deputy Registrar
Hazila binti Rahmat



**Senior Assistant Registrar
(Academic)**
Nurazlyna binti Marjid



**Senior Assistant Registrar
(Research & Innovation)**
Radlah binti Mohd Alip



**Assistant Registrar
(Student Affair)**
Enna Fasilah binti Fadilah



Engineer
Abd Basid Abd Rahman



**Senior Assistant Registrar
(Human Resource)**
Norliza binti Abdul Rahim



**Assistant Registrar
(Human Resource)**
Asyakireen Samsudin



**Senior Assistant Registrar
(Quality & Strategy)**
Murni Haryanti binti Muslim





LEADERSHIP & MANAGEMENT

UTM ENGINEERING



Prof. Dato' Ir. Dr. Mohammed Rafiq bin Dato' Abdul Kadir

Dekan

Chair of School

Dean's Office



Prof. Dr. Mohd Ghazali bin Mohd Nawawi

Pengerusi SKT



Prof. Dr. Mohd Hasbullah bin Haji Idris

Pengerusi SKM



Prof. Dr. Khairul Anuar bin Kassim

Pengerusi SKA



Prof. Dr. Mohd Wazir bin Mustafa

Pengerusi SKE



Prof. Dr. Wan Mohd Nasir bin Wan Kadir

Pengerusi SC



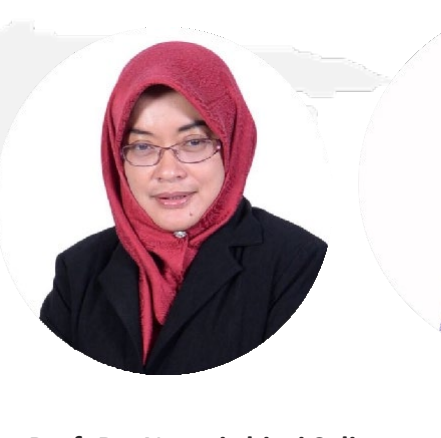
Prof. Dr. Kahar bin Osman

Pengerusi SKBSK



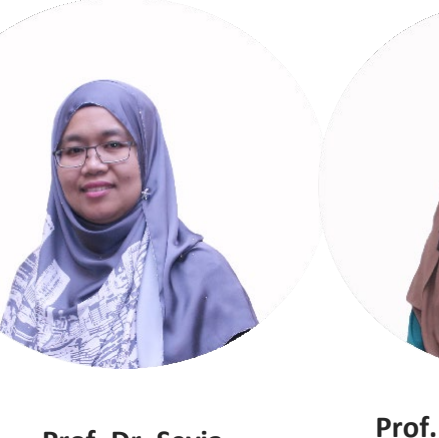
Prof. Dr. Ahmad Baharuddin bin Abd Rahman

Timbalan Dekan (Akademik)



Prof. Dr. Naomis binti Salim

Timbalan Dekan (Penyelidikan & Inovasi)



Prof. Dr. Sevia Mahdaliza binti Idrus

Timbalan Dekan (Pembangunan & Alumni)



Prof. Madya Dr. Roshanida binti A. Rahman

Timbalan Dekan (Hal Ehwal Pelajar)

Associate Chairs

5 Academic & Student Development

5 Research & Academic Staff

6 Quality & Strategy

6 Facility

5 Continuing & Transnational Education



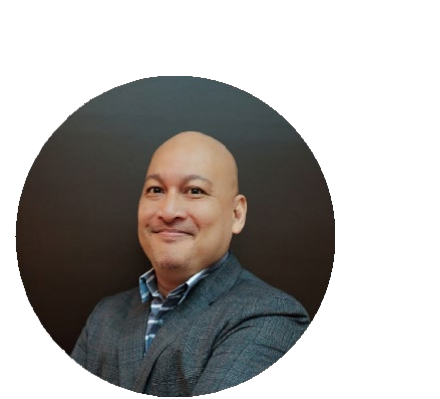
Prof. Ts. Dr. Abd Latif bin Saleh

Penolong Dekan (Kualiti & Strategi)



Prof. Ir. Dr. Shuhaimi bin Mansor

Penolong Dekan (Global & Hubungan Luar)



Prof. Dr. Norhazilan bin Mohd Noor

Penolong Dekan (Transnasional & Pendidikan Berterusan)

20 Academic Directors

UTM ENGINEERING Strategy Map

2020

Vision, Mission & Thrust

Vision: To be a premier global faculty in engineering and technology

Mission: Synergizing academic capacity to nurture holistic talents and lead in innovative technologies.

T1: Holistic, Innovative and Entrepreneurial Academia

T2: Academic & Research Excellence

T3: Leading Industry & Community

T4: Global Prominence

STUDENTS, STAFF, GOVERNMENT, INDUSTRY & COMMUNITY

Stakeholder



S1: Globally Marketable, Holistic Entrepreneurial and Balanced Graduates

S1.1, S1.2,

S2: UTM Core Values-Driven Talent with Great Sense of Well-being

S2.1

S3: Widening Access to Flexible and Quality Education
S4: Creative Market Driven Products & Services

S5: Headline Making Global Prominence in Academic & Research
S3.1, S4.1, S4.2, S4.3, S4.1.5, S5.1, S5.1.1, S5.1.2, S5.1.3, S5.2, S5.2.2, S5.3, S5.3.1, S5.3.7

Internal Processes



P1: 21st Century Curriculum Design & Delivery using Life Ready Graduate Framework

P1.1

P2: Transformative Student Experience

P2.2

P3: Excellent Research Standing through Niche Building and Translational Research

P3.1, P3.2

P4: Accelerated High Performance Delivery Enforced by Effective Governance System

P4.1, P4.2

Learning & Growth



L1: Develop Exemplary Talent with Future Proof KSAs and Holistic Values

L1.1

L2: Enhanced Technology and Information System in Digital Age

L2.1

L3: Provide Green and Sustainable Organizational Resources

L3.1, L3.2

Financial



F1: Enculturate Strategic and Innovative Financial Management

F1.1

F2: Diversity Income Generation for Financial Sustainability

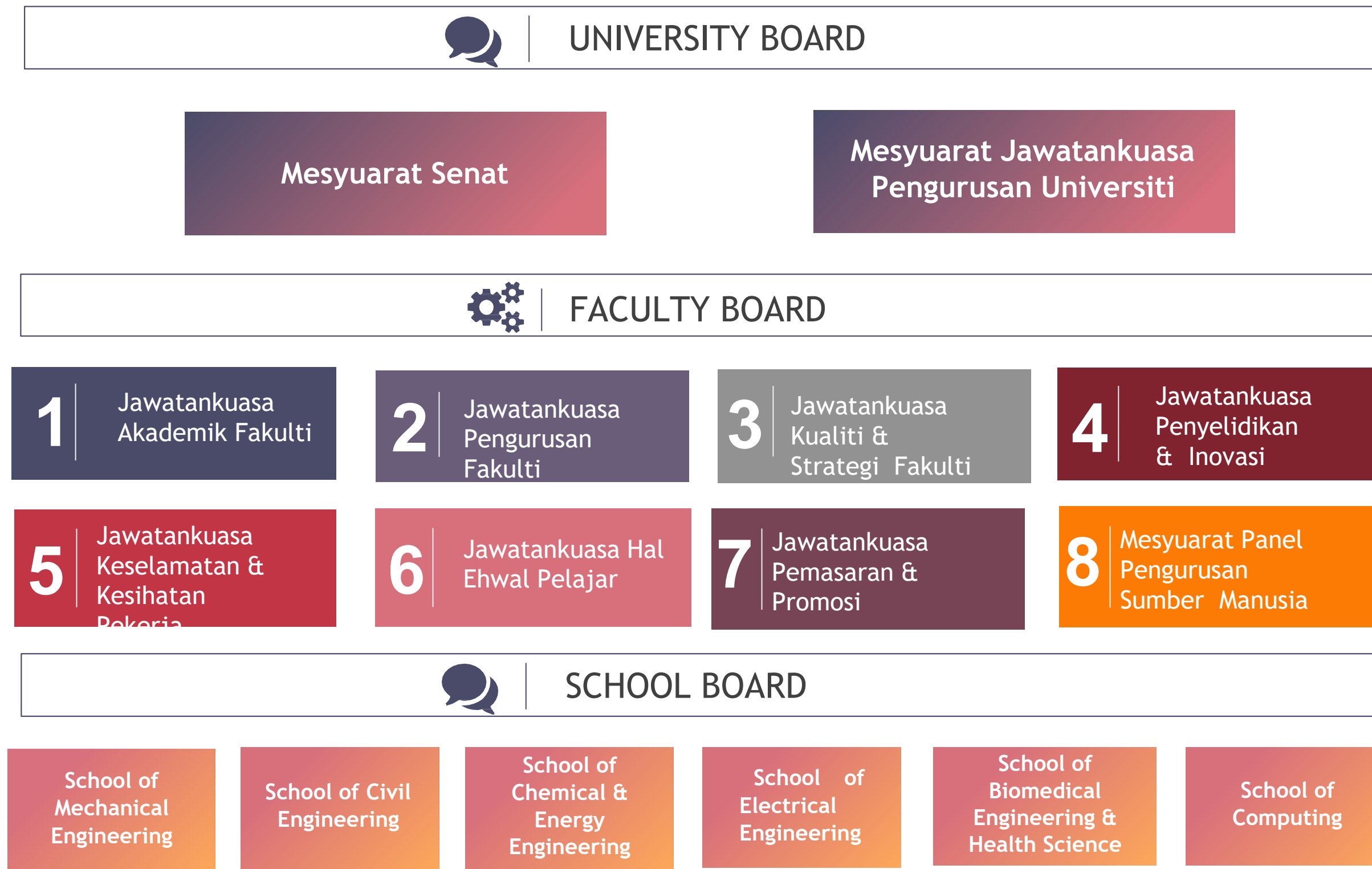
F2.1

Core Values

Integrity, Sinergy, Excellence & Sustainability

Governance Framework Faculty of Engineering

Overview of FE Governance Framework



CONTINUOUS QUALITY IMPROVEMENT

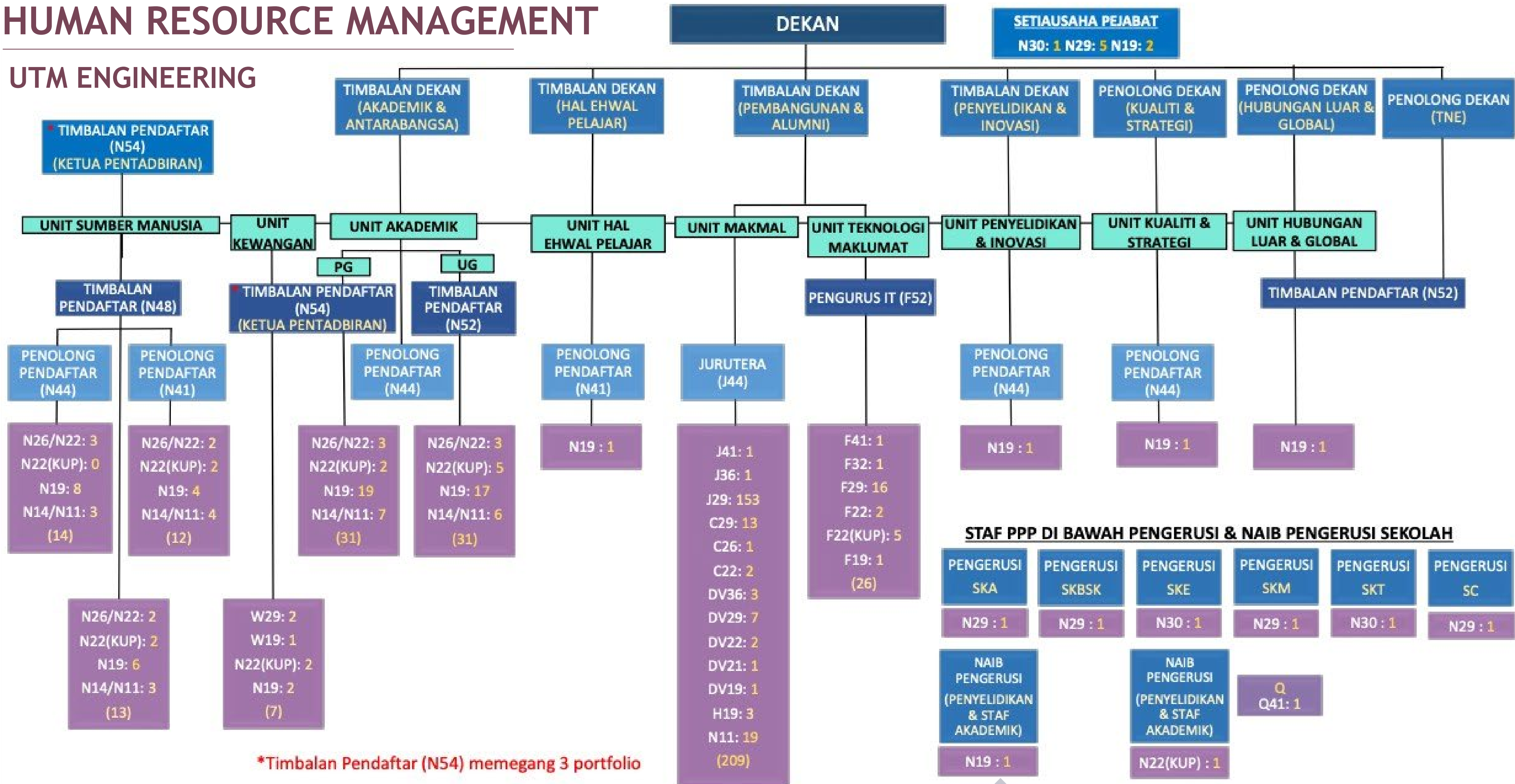
- Schools provide report on academic programme review APAR;
- Faculty provide report on academic programme review – APAER;
- New programme development will go to JKAF JKKU, JKTS, senate at University Level;
- Each School will recommend recruitment, Performance Appraisal and promotion of Staff; faculty will analyze

INFORMATION FLOW

- School minutes are provided to faculty Board
- Faculty Committee minutes are provided to Faculty Board
- Faculty Board will provide minute of meeting and recommendation for University Board approval

HUMAN RESOURCE MANAGEMENT

UTM ENGINEERING



*Timbalan Pendaftar (N54) memegang 3 portfolio

Human Resource Framework Faculty of Engineering

Overview of FE HR Framework for Academic Staff

LAPOR DIRI

- Menandatangani surat penerimaan jawatan, Akuan Sumpah, surat Akta Rasmi 1972,
- Melengkapkan borang pemeriksaan perubatan dan borang pendaftaran klinik panel
- Mengisi borang kemasukan data kakitangan baru

PENILAIAN PRESTASI

- Kemasukan data 7p
- Semakan dan pengesahan data oleh pegawai penilai
- Penilaian markah prestasi oleh pegawai penilai
- Staf perlu membuat pilhan Trek DCP samada Pengajaran, Penyelidikan, Amalan Profesional atau Transisi

PERSARAAN

- Telah disahkan dalam jawatan
- Telah diluluskan Pemberian Taraf Berpencen.
- Berumur 40 tahun dan ke atas dan mempunyai tempoh perkhidmatan tidak kurang daripada 10 tahun yang boleh dimasukkiran. (Bersara pilihan)



SAH JAWATAN

- Memenuhi tempoh percubaan 1 hingga 3 tahun
- Hadir dengan jayanya Program Transformasi Minda (PTM)
- Lulus peperiksaan yang disyaratkan mengikut skim perkhidmatan
- Diperakukan oleh Ketua Jabatan.

KENAIKAN PANGKAT

- Disahkan dalam perkhidmatan.
- Mencapai tahap kecermelangan akademik
- Melempi semua penilaian tahap kecekapan yang ditetapkan.
- Diperaku oleh Ketua Jabatan/Ketua Perkhidmatan.
- Staf menghantar permohonan bersama CV.
- Staf perlu membuat pilhan Major DCP samada Pengajaran, Penyelidikan dan Amalan Profesional atau Transisi.

Human Resource Framework Faculty of Engineering

Overview of FE HR Framework for Professional & Support Staff

LAPOR DIRI

- Menandatangani surat penerimaan jawatan, Akuan Sumpah, surat Akta Rasmi 1972,
- Melengkapkan borang pemeriksaan perubatan dan borang pendaftaran klinik panel
- Mengisi borang kemasukan data kakitangan baru

PENILAIAN PRESTASI

- Kemasukan data KAI, SKT dan Kegiatan & Sumbangan
- Semakan dan pengesahan data oleh pegawai penilai
- Penilaian markah prestasi oleh pegawai penilai

PERSARAAN

- Telah disahkan dalam jawatan
- Telah diluluskan Pemberian Taraf Berpencen.
- Berumur 40 tahun dan ke atas dan mempunyai tempoh perkhidmatan tidak kurang daripada 10 tahun yang boleh dimasukkiran. (Bersara pilihan)



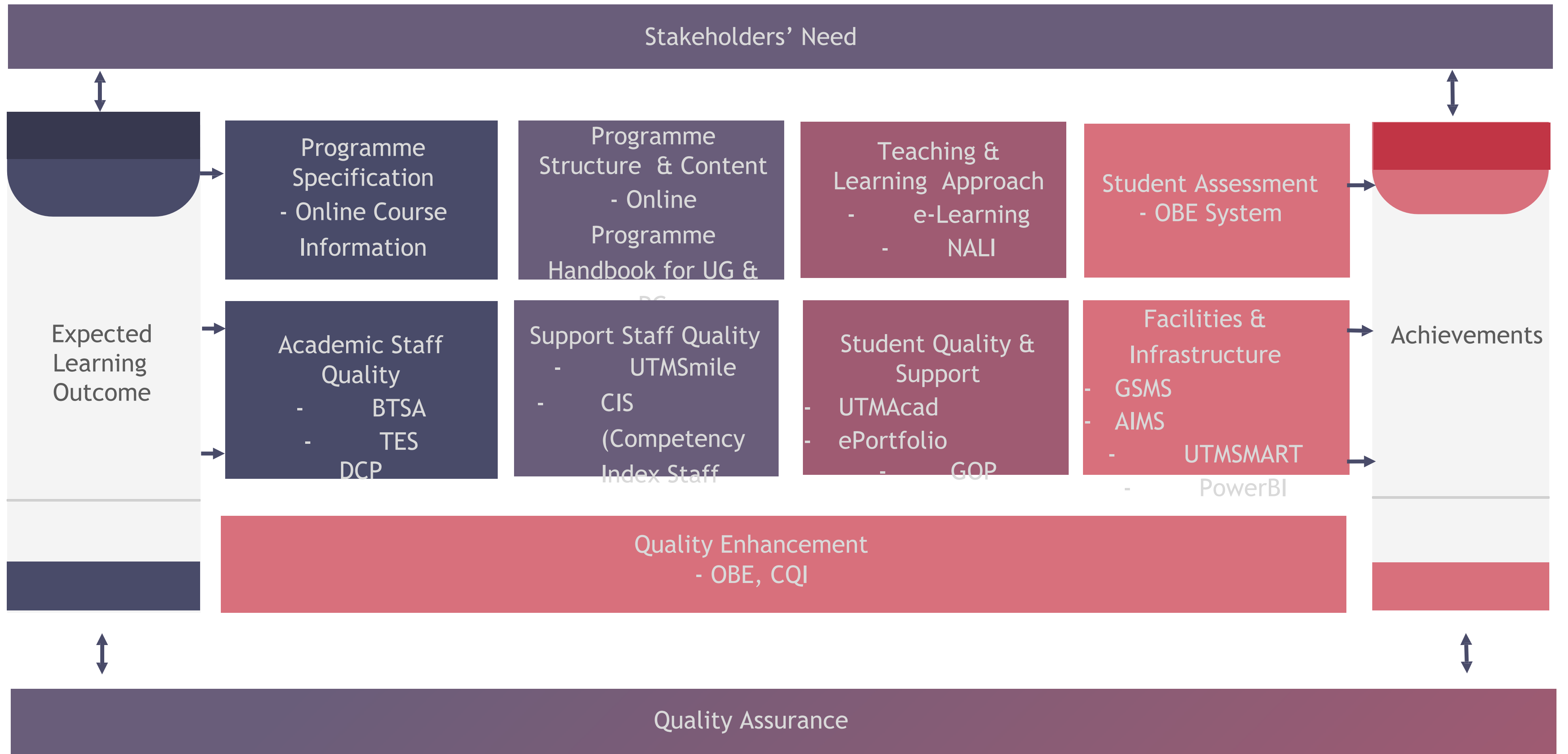
SAH JAWATAN

- Menamatkan tempoh percubaan dengan memuaskan
- Hadir dengan jayanya Program Transformasi Minda (PTM)
- Lulus peperiksaan yang disyaratkan mengikut skim perkhidmatan
- Diperakukan oleh Ketua Jabatan.

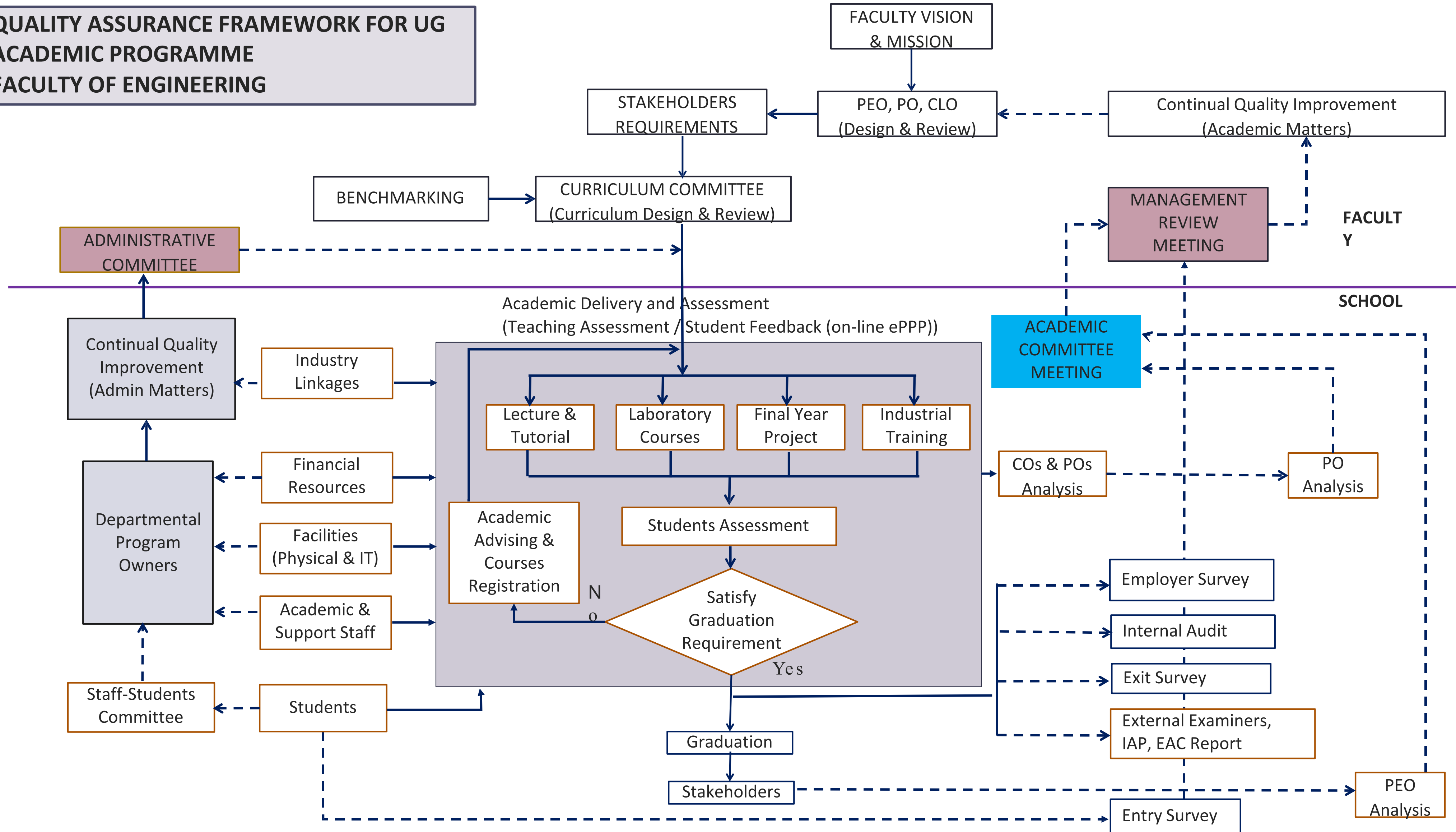
KENAIKAN PANGKAT

- Disahkan dalam perkhidmatan.
- Melempi semua penilaian tahap kecekapan yang ditetapkan.
- Diperaku oleh Ketua Jabatan/Ketua Perkhidmatan.

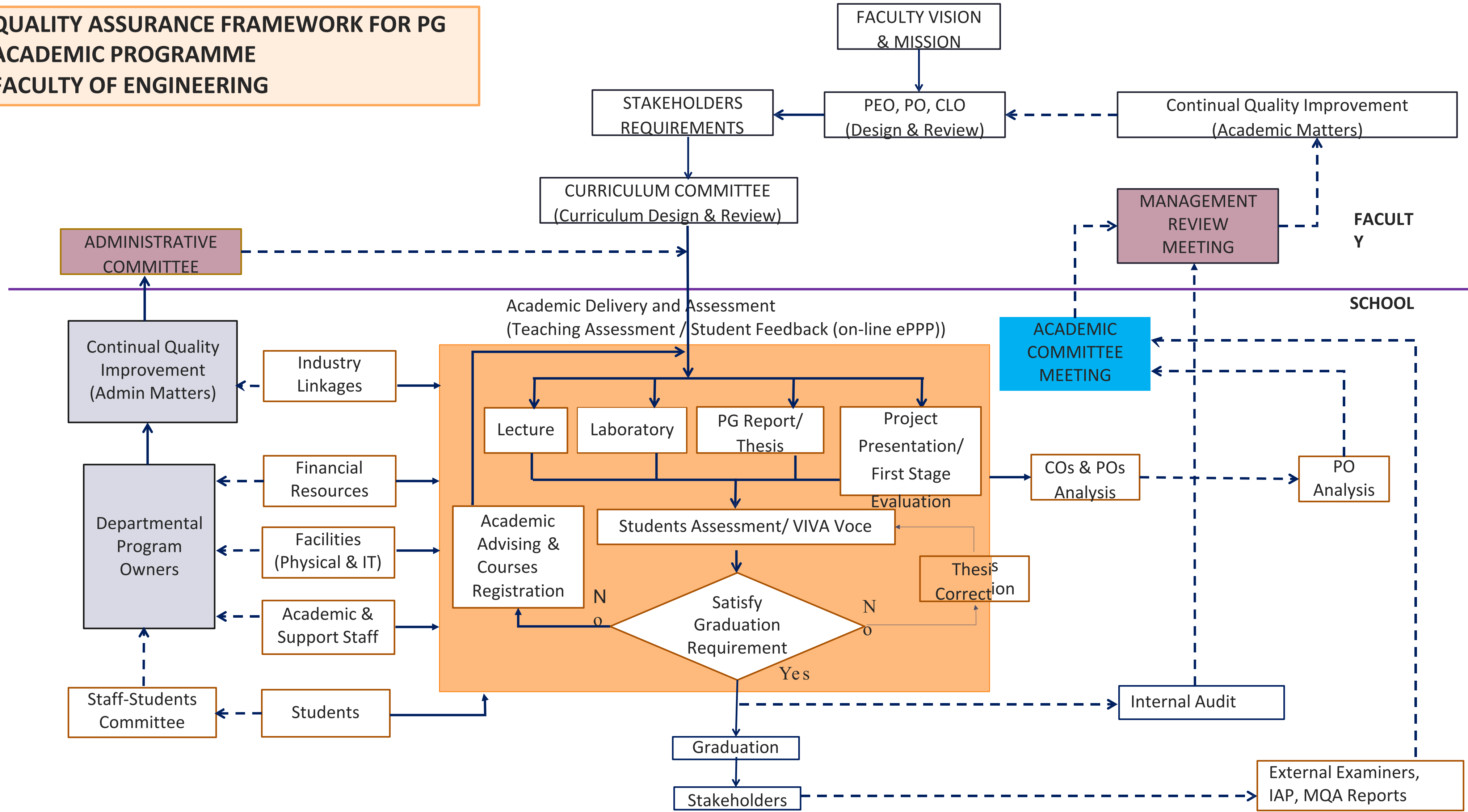
Internal QA Information Management Framework



QUALITY ASSURANCE FRAMEWORK FOR UG ACADEMIC PROGRAMME FACULTY OF ENGINEERING



QUALITY ASSURANCE FRAMEWORK FOR PG ACADEMIC PROGRAMME FACULTY OF ENGINEERING



FACULTY VISION & MISSION

STAKEHOLDERS REQUIREMENTS

PEO, PO, CLO (Design & Review)

Continual Quality Improvement (Academic Matters)

CURRICULUM COMMITTEE (Curriculum Design & Review)

MANAGEMENT REVIEW MEETING

FACULTY

ADMINISTRATIVE COMMITTEE

SCHOOL

Academic Delivery and Assessment (Teaching Assessment / Student Feedback (on-line ePPP))

ACADEMIC COMMITTEE MEETING

Lecture

Laboratory

PG Report/Thesis

Project Presentation/First Stage Evaluation

COs & POs Analysis

PO Analysis

Academic Advising & Courses Registration

Students Assessment/ VIVA Voce

Thesis Correction

Satisfy Graduation Requirement

Internal Audit

Graduation

Stakeholders

External Examiners, IAP, MQA Reports

Continual Quality Improvement (Admin Matters)

Departmental Program Owners

Staff-Students Committee

Industry Linkages

Financial Resources

Facilities (Physical & IT)

Academic & Support Staff

Students



Academic Programs @UTM Engineering

● 6 SCH
S O O L S



23 UG PROGRAM



56 MASTER PROGRAM



18 DOCTORATE
PROGRAM

9. Curriculum Design & Review

- The curriculum design and review process, and curricula are improved.



- ✓ Ranked 85 in the Faculty of Engineering & Technology
- ✓ Best Global Universities Top 40 in Engineering
- ✓ 2019-2021 MDEC Premier Digital Tech University
- ✓ Washington Accord Signatory
- ✓ 2019/2020 US News Best Global Universities Top 2 universities in Malaysia and Top 40 in the world for Engineering

UTM UNIVERSITI TEKNOLOGI MALAYSIA

QS WORLD UNIVERSITY RANKINGS by subject

Congratulations

16 SUBJECTS RANKED IN QS WORLD UNIVERSITY RANKINGS BY SUBJECT 2020

TOP 100 in the World

- Architecture / Built Environment
- Civil Engineering
- Chemical Engineering
- Electrical & Electronics Engineering

No. 1 in Malaysia

- Architecture / Built Environment
- Civil Engineering

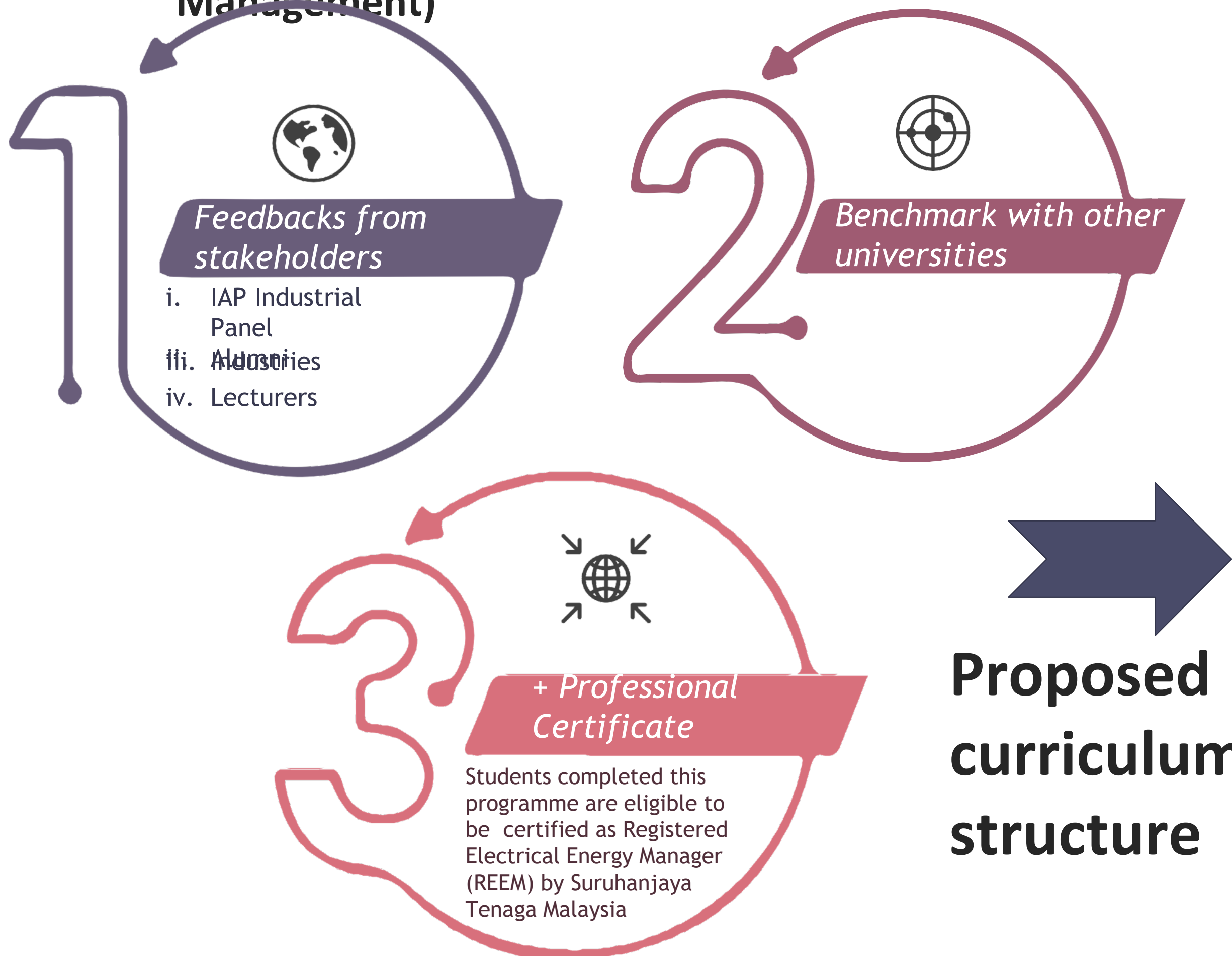
From: UTM Commu

UTM 5 Star QS Overall TOP 50 Best TOP 20 Universities under

www.utm.my

Curriculum Development

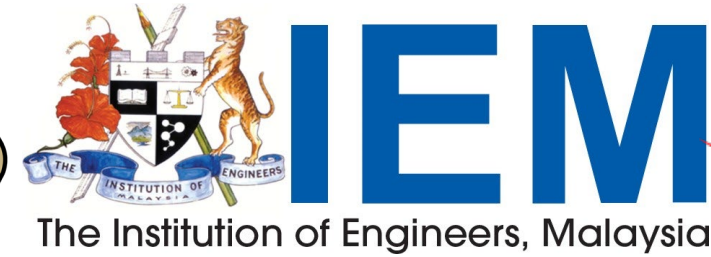
Master of Science (Energy Management)



PROGRAMME CORE COURSES (Compulsory)					
1	MKKE 1213	Sustainable Energy Management	3	3	
2	MKKE 1223	Project Management and Ethics	3	3	
3	MKKE 1113	Mechanical and Electrical Energy Management	3	3	
4	MKKE 1123	Energy Life Cycle Cost and Emission Analysis	3	3	
5	MKKE 1233	Research Methodology and Design of Experiments	3	3	
6	MKKE 1243	Computer Aided Tools for Energy-Efficient Industry	3	3	
TOTAL CREDIT OF CORE COURSES (a)			12	12	
PROGRAMME ELECTIVE COURSE (Choose only 4 Courses)					
1	MKKE 2133	Renewable Energy	12	12	
2	MKKE 2163	Biomass for Renewable Energy, Fuels and Chemicals			
3	MKKE 2173	Inherent Occupational Health Assessment in Chemical Process			
4	MKKE 2153	Thermal Energy Management			
5	MKKE 2143	Energy Integration and Resource Conservation			
6	MKKE 2253	Solid and Hazardous Waste Management			
TOTAL CREDIT OF ELECTIVE COURSE (b)			12	12	
UNIVERSITY GENERAL COURSE					
1	U*** **3	University General Course	3	3	
TOTAL CREDIT OF UNIVERSITY GENERAL COURSE (c)			3	3	
RESEARCH SKILLS					
1	MKKE 1315	Master Project 1	5	5	
2	MKKE 2327	Master Project 2	7	7	
TOTAL CREDIT OF RESEARCH SKILLS (d)			12	12	
TOTAL CREDIT TO GRADUATE [(a)+(b)+(c)+(d)]			45	45	

UNDERGRADUATE ACADEMIC PROGRAMMES AUDITED IN

2019 
Recognised Worldwide



No	Programme Name	Accredited Graduate Year	No. of Accredited Years
1	Bachelor of Engineering (Chemical)	2018-2023	6
2	Bachelor of Engineering (Chemical-BioProcess)	2018-2020	3
3	Bachelor of Engineering (Chemical-Gas)	2019-2024	6
4	Bachelor of Engineering (Petroleum)	2019-2024	6
5	Bachelor of Engineering (Nuclear)	2020-2025	6
6	Bachelor of Engineering (Electrical)	2019-2021	3
7	Bachelor of Engineering (Electrical-Electronics)	2019-2024	6
8	Bachelor of Engineering (Electrical-Mechatronics)	2019-2021	3
9	Bachelor of Engineering (Civil)	2018-2023	6
10	Bachelor of Engineering (Biomedical)	2019-2021	3

UNDERGRADUATE ACADEMIC PROGRAMMES AUDITED IN

2019 
Recognised Worldwide



The Institution of Engineers, Malaysia



Agensi Kelayakan Malaysia
Malaysian Qualifications Agency



No	Programme Name	Accredited Graduate Year	No. of Accredited Years
1	Bachelor of Science (Mechanical-Industrial)	2018-2023	6
2	Bachelor of Science (Mechanical-Manufacturing)	2018-2023	6
3	Bachelor of Mechanical Engineering (Aeronautics)	2018-2023	6
4	Bachelor of Mechanical Engineering (Automotive)	2018-2023	6
5	Bachelor of Mechanical Engineering (Materials)	2018-2023	6
6	Bachelor of Mechanical Naval Architecture and Offshore Engineering	2019-2024	6
7	Bachelor of Engineering Mechanical	2018-2023	6

UNDERGRADUATE ACADEMIC PROGRAMMES AUDITED IN

2019
Recognised Worldwide



The Institution of Engineers, Malaysia



Agensi Kelayakan Malaysia
Malaysian Qualifications Agency



No	Programme Name	PDTI Status
1	Bachelor of Computer Science (Software Engineering)	2018-2020
2	Bachelor of Computer Science (Data Engineering) – 2u2i	2018-2020
3	Bachelor of Computer Science (Computer Networks and Security)	2018-2020
4	Bachelor of Computer Science (Graphics and Multimedia Software)	2018-2020
5	Bachelor of Computer Science (Bioinformatics)	2018-2020

MQA (Full Accreditation)

2u2i PROGRAM - WORK BASED LEARNING WITH INDUSTRY COLLABORATION

- Bachelor of Computer Science (Data Engineering) is **the first ICT-based program in Malaysia** offered as a 2u2i program in UTM using a 3u1i model which aim to produce more data professionals in digital jobs economy.
- The program was first offered in 2016 and the School of Computing has collaborated with many industry partners in the teaching and learning in both *Day Release* and *Block Release* Work-based Learning Courses.
- For **Day Release WBL courses** (Year 1, Year 2 and Year 3), SC collaborate with SMEs around JB. Among the industries are Mechabotics, Thinker Space (M) Sdn Bhd, Warna Digital Plt, CS Nano Technologies Sdn Bhd., Holistic Lab Sdn Bhd, Ami Niat Agrotek Sinergi Sdn Bhd
- For **Block Release WBL courses** (Year 4), SC collaborates with Telekom Malaysia, DHL, TopGlove, IJM Corporation Bhd, PPG Coatings (Malaysia) Sdn Bhd, Petroliam Nasional Berhad (Petronas) and DataMicron Systems Sdn Bhd





Application of 4IR technology tools in UG/PG Curriculum



- Arduino: Open-source electronics platform based on easy-to-use hardware and software (apply in Capstone Projects)
- ATmega32: 8-bit high performance microcontroller.
- Altera DE2 Board: Altera DE2 Development and Education board is to provide the ideal vehicle for advanced design prototyping in the multimedia, storage, and networking.
- Quartus II (for CAD programming).
- IoT Devices, LEGO
- Cadence, Matlab, Cloud Database in FYP, etc.

TNE PROGRAMME



● **SKA** Padang Indonesia

● **SKM** Ijazah Sarjana Muda (Mekanikal - Pembuatan) with Politeknik Negeri Jakarta, Indonesia

● **SKT** Program Dwi Ijazah (Double Degree Programme), Doktor Falsafah with Shizuoka University, Shizuoka-ken, Japan

● **SKBSK** International Double Degree Postgraduate Program In Biomedical Engineering With Faculty Of Computer Science And Automation, Technische Universitaet Ilmenau (Tuil), Ilmenau, Germany

● **SKE** Program Dwi-ijazah (Double Degree) Master Of Engineering (Mechatronics And Automatic Control) With University Of Burgundy (Uob), Burgundy, France

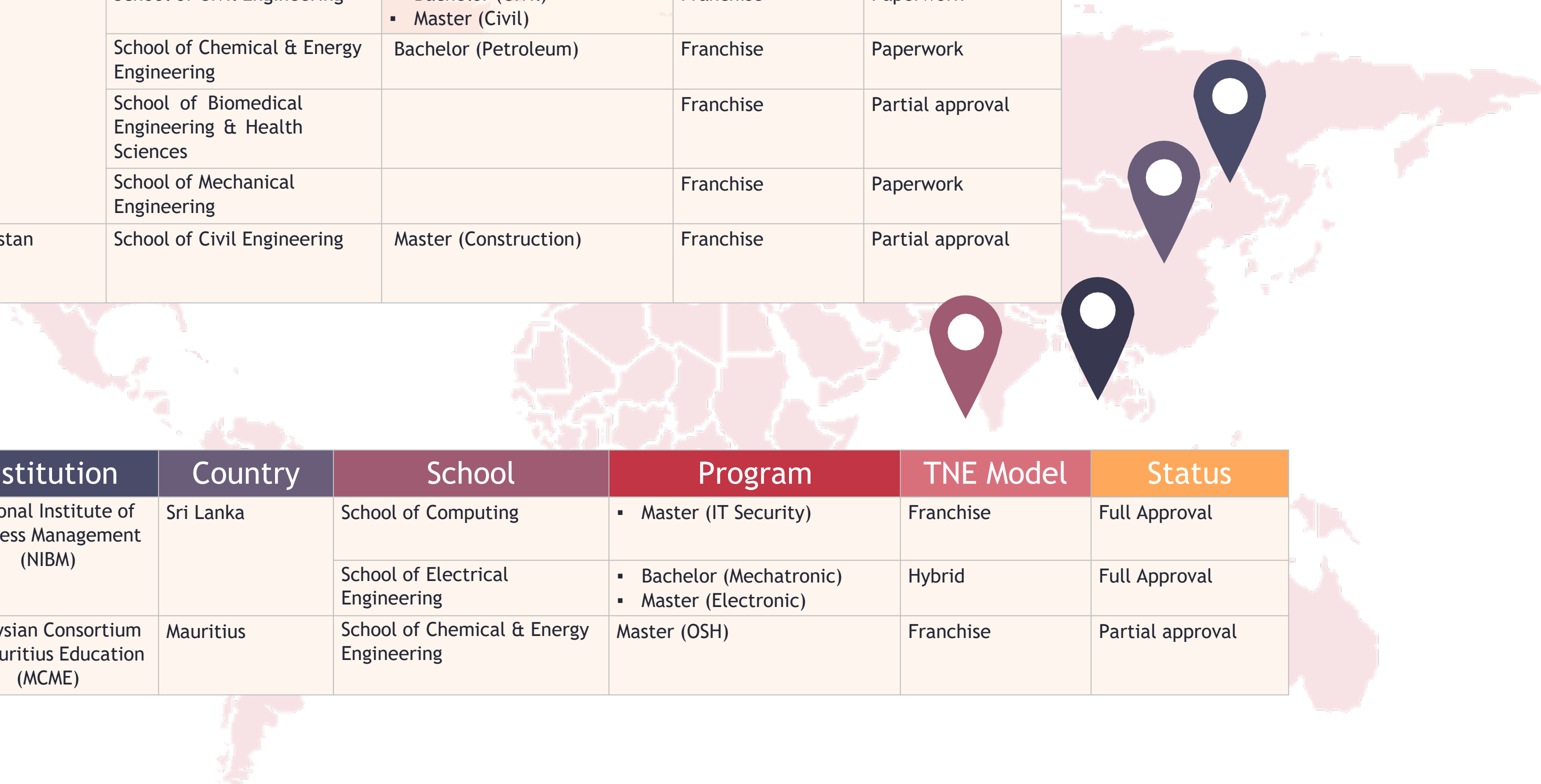
Program Dual Ijazah (Dual Degree) Doktor Falsafah Kejuruteraan Elektrik (Utm) Dan Doktor Falsafah Kejuruteraan Isyarat (Univ. Of Rennes) With University Of Rennes, Rennes, France

ONGOING TNE PROGRAM IN FE UTM



No	Institution	Country	School	Program	TNE Model	Status
1	Qaiwan University	Kurdistan Iraq	School of Computing	<ul style="list-style-type: none"> Bachelor (Software) Bachelor (Network) Master (Computer Science) 	Franchise	Ongoing
			School of Civil Engineering	<ul style="list-style-type: none"> Bachelor (Civil) Master (Civil) 	Franchise	Paperwork
			School of Chemical & Energy Engineering	Bachelor (Petroleum)	Franchise	Paperwork
			School of Biomedical Engineering & Health Sciences		Franchise	Partial approval
			School of Mechanical Engineering		Franchise	Paperwork
2	Tashkent Institute of Architecture and Civil Engineering (TIACE)	Uzbekistan	School of Civil Engineering	Master (Construction)	Franchise	Partial approval

No	Institution	Country	School	Program	TNE Model	Status
1	National Institute of Business Management (NIBM)	Sri Lanka	School of Computing	<ul style="list-style-type: none"> Master (IT Security) 	Franchise	Full Approval
			School of Electrical Engineering	<ul style="list-style-type: none"> Bachelor (Mechatronic) Master (Electronic) 	Hybrid	Full Approval
2	Malaysian Consortium of Mauritius Education (MCME)	Mauritius	School of Chemical & Energy Engineering	Master (OSH)	Franchise	Partial approval



TNE PROGRAM (2019)



- Continuous quality monitoring of Bachelor of Computing (Software engineering & Network security) at Qaiwan International University.

- Preparation for a new program of Bachelor of Engineering (Biomedical) at Qaiwan International University in year 2020 under franchise category.

- Marketing activities for two new programs of Bachelor of Electrical Engineering (Mechatronic and Electrical) offered at

- National Institute of Business Management (NIBM) Sri Lanka under hybrid category.

Establishment of Foundation program for Engineering at Qaiwan



FUTURE READY EDUCATOR'S (FREE) ACTIVITIES



ACTIVE LEARNING
Talk, meeting, workshop, dialog session, courses, knowledge sharing session

PROBLEM-BASED LEARNING
School planning

COOPERATIVE LEARNING
Colloquium sharing experience and meeting

PROJECT-BASED
Student workshop

WORK-BASED LEARNING
Talk, meeting, workshop, dialog session, courses, knowledge sharing session

NALI 2019

ACHIEVEMENTS

Silver Winner

1. AUTOMOBILE VIRTUAL REALITY MODULE (AVRM)
2. QUALITY IMPROVEMENT IN ELECTRICAL CIRCUIT ANALYSIS COURSE THROUGH IMPLEMENTATION OF NON-CONVENTIONAL GROUP ACTIVITY FOR BACHELOR OF ENGINEERING (ELECTRICAL-ELECTRONICS)
3. IDEATION OF CAPSTONE PROJECT USING COGGLE MIND MAP APPLICATION TO ENHANCE SCHOOL'S LIBRARY SERVICE
4. INTRODUCING AN ONLINE BASED SYSTEM TO ASSESS STUDENT'S PROGRESS FOR SKE CAPSTONE PROJECT
5. HARNESSING COOPERATIVE LEARNING ENVIRONMENT IN DIGITAL ELECTRONIC COURSE
6. STUDENT'S REFLECTIVE JOURNAL AS A TOOL FOR TEACHING PLAN

Gold Winner



1. IMPLEMENTATION OF AN INTEGRATED WORK-BASED LEARNING COURSES IN INDUSTRY-INFUSED CURRICULUM
2. INDUSTRY-INFUSED CURRICULUM IN COMPUTING EDUCATION FOR FUTURE READY GRADUATES
3. TEACHING AND LEARNING IN FLUID MECHANICS: GAMIFICATION AS A SUPPORTIVE TOOL
4. ALIGNING AND MAPPING 21ST CENTURY LEARNING SKILLS WITH SOFTWARE ENGINEERING PROFESSIONAL SKILLS VIA COLLABORATIVE PROJECTS
5. ASSESSMENT FOR UTM CHEMICAL ENGINEERING INTEGRATED COURSE
6. IMPLEMENTATION OF HANDS - ON LEARNING IN ELECTRONIC SYSTEM COURSE
7. STRUCTURED FRAMEWORK TO FACILITATE RESEARCH METHODOLOGY SKILLS IN FINAL YEAR PROJECT FOR BACHELOR OF ENGINEERING (ELECTRICAL-ELECTRONICS) PROGRAM

Bronze Winner



1. NON-CONVENTIONAL L&T STRATEGIES IN SOIL MECHANICS COURSE: STUDENTS PERCEPTION TOWARDS KNOWLEDGE, MOTIVATION AND SKILLS DEVELOPMENT
2. MAPATHON: PEMBELAJARAN BERASASKAN SERVIS KEPADA KOMUNITI
3. SCENARIO BASED-LEARNING IN HIGH VOLTAGE TECHNOLOGY FOR 3RD YEAR STUDENTS OF SKE
4. HIGHER EDUCATION 4.0: EVALUATION ON THE INNOVATION AND READINESS TO IMPLEMENT INDUSTRIAL REVOLUTION 4.0 FOR UNDERGRADUATE MECHANICAL ENGINEERING STUDENTS

NALI 2019

AWARD ★★★★★

“Blended-cooperative Problem-based Learning For UTM Process Control Course” Project From SKT



Team Member

ASSOC PROF. TS. DR. MOHD KAMARUDDIN ABD HAMID

PROF. DR. KHAIRIYAH MOHD YUSOFF

IR. DR. ZAKI YAMANI ZAKARIA

DR. AZIZUL AZRI BIN MUSTAFFA

DR. AZIATUL NIZA BINTI

SADIKIN



2019 Contributory Cascaded Number of Students for UTM Inbound Mobility

	Total Target	Academic Visit		Summer School		Research Internship		Student Exchange		Total Achievement	
		Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement		
FE	494	178	84	133	284	50	135	133	212	715	145%

2019 Contributory Cascaded Number of Students for UTM Outbound Mobility

	Total Target	Global Outreach Program		Study Abroad		Research Internship		International Invitation Program		Summer School Abroad		Total Achievement	
		Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement		
FE	419	114	78	40	26	56	56	134	71	75	19	250	60%

* No target given due to no enrollment

** Other PTJs (e.g. UTM International, UTM SPACE, etc.)

2019/20 UTM Global Rankings

Assistant Dean

**EXTERNAL
&**

GLOBAL ENGAGEMENT

Shuhaimi Mansor

0197799778

shuhaimi@utm.my



	CURRENT POSITION	Original KPI 2020	Revised Target for 2020	Target for 2021	Target for 2022
UTM QS World Ranking	217	200	180 - 150	150 - 100	100 - 70

▶ STUDENTS ASSESSMENT

ACTION

1. Course Assessment Report
2. APAR/APAER
3. Mesyuarat Jawatankuasa Akademik School and Faculty
4. CLO/PLO Achievement

CHECK

1. Rubric
2. OBE System Evaluation Criteria
3. CS
4. Marking Scheme



PLAN

1. Established course information for each program (course, FYP, LI, Lab)

DO

1. Vetting process
2. Test, final exam, assignment project and lab work
3. FYP presentation
4. LI attachment

OVERALL GRADUATE EMPLOYABILITY

SK A | **93%**

SK B SK | **92%**

SK E | **96%**

SK T | **92%**

SK M | **93%**

SC | **95%**

FE | **93.5%**





Speaker's
Corner





Cairo Talk




E-Portfolio
Winner




Student
Carnival

Student's Activities

SOMETHING ABOUT
SLIDE



Whether you are an established business or a startup, ensuring



Whether you are an established business or a startup, ensuring



Whether you are an established business or a startup, ensuring




Schlumberger
Program

Student's Activities

SOMETHING ABOUT
SLIDE




Student Lunch &
Learn with
Professor



Whether you are an established business or a startup, ensuring




J-Biotech
Award



Whether you are an established business or a startup, ensuring




Huawei Seed
Program
@China



Whether you are an established business or a startup, ensuring



DJ WATER SDN. BHD

Co. No 275034 - W

- **Civil Engineering**



Smarter thinking.

- Civil Engineering



- **Civil Engineering**



- **Civil Engineering**
- **Mechanical Engineering**



- **Civil Engineering**

iSmartUrus Sdn Bhd

(1057063-A) UTM Spin-off Company

- **Civil Engineering**



AHN VERTEX

SDN BHD

- **Civil Engineering**

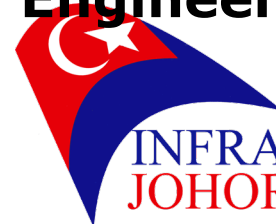


Ranhill SAJ

- **Civil Engineering**
- **Mechanical Engineering**



- **Civil Engineering**



INFRA DESA JOHOR

- **Civil Engineering**



- **Civil Engineering**



- **Computing**



Maybricks Sdn Bhd

- **Civil Engineering**
- **Mechanical Engineering**



- **Electrical Engineering**
- **Civil Engineering**



- **Electrical Engineering**
- **Computing**



- **Electrical Engineering**
- **Computing**



- **Electrical Engineering**
- **Computing**



- **Mechanical Engineering**
- **Electrical Engineering**



- **Electrical Engineering**



- **Electrical Engineering**



- **Mechanical Engineering**
- **Electrical Engineering**



- **Mechanical Engineering**
- **Electrical Engineering**

ENGAGEMENT & SYNERGY WITH INDUSTRY



- **Electrical Engineering**



- **Mechanical Engineering**
- **Electrical Engineering**
- **Computing**



- **Mechanical Engineering**



- **Mechanical Engineering**



- **Mechanical Engineering**



- **Mechanical Engineering**



CONTRACT RESEARCH, SERVICE, CONSULTANCY



CUBATION & COMMERCIALIZATION



ALUMNI RELATION & ENDOWMENT



CAPACITY BUILDING (STUDENTS & STAFF)



CSR & COMMUNITY ENGAGEMENT



PROFESSIONAL TRAINING & COURSES



THANK YOU



MANAGEMENT TEAM UTM ENGINEERING

Prepared by: Quality & Strategy Unit | FE