



اوتنورسيتي مليسيا فهغ السلطان عبد الله
UNIVERSITI MALAYSIA PAHANG
AL-SULTAN ABDULLAH

The Transformation of Collection Development and It's Impact: Perspective from Library and Academic Office UMPSA

Southeast Asia Libraries of the Future Summit 2024, “Building the Library of Tomorrow: Sustainable Innovations for a Resilient Future”

At G Hotel Gurney in Penang, Malaysia



ABOUT UMPSA

Established as a technical university in 2002, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) offers a variety of engineering and technology-based technical programmes, including high-level Technical and Vocational Education and Training (TVET).

**PUBLIC
UNIVERSITY**

16th Public University in
Malaysia

**TECHNICAL
UNIVERSITY**

Engineering and
Technology

**TVET ARAS
TINGGI**

Technical & Vocational
Education Training
(TVET)



Pekan
667.9 acres

Gambang
115 acres

22 YEARS

Top 100 – 150
University below
50 Years

MTUN

Best university in the
Malaysian Technical
University Network (MTUN)

VISION

A Distinguished Technological University

MISSION

We provide world class education, research and services in an ecosystem of creative and innovative engineering and technology to maximize human potential for societal good.

SLOGAN

Teknologi Untuk Masyarakat
Technology for Society

Source: Slaid Korporat UMPSA










FACULTY / CENTRE / INSTITUTE

UMPSA PEKAN	FACULTY	UMPSA GAMBANG
<ol style="list-style-type: none"> 1. Faculty of Electrical and Electronics Engineering Technology 2. Faculty of Manufacturing and Mechatronic Engineering Technology 3. Faculty of Mechanical and Automotive Engineering Technology 4. Faculty of Computing 	CENTRE	<ol style="list-style-type: none"> 1. Faculty of Chemical and Process Engineering Technology 2. Faculty of Civil Engineering Technology 3. Faculty of Industrial Sciences and Technology 4. Faculty of Industrial Management
<ol style="list-style-type: none"> 1. Centre for Modern Languages 	INSTITUTE	<ol style="list-style-type: none"> 1. Centre for Mathematical Sciences 2. Centre for Human Sciences
<ol style="list-style-type: none"> 1. Confucius Institute 		<ol style="list-style-type: none"> 1. Institute of Postgraduate Studies

Source: Slaid Korporat UMPSA

UMPSA ACHIEVEMENT

INTERNATIONAL RANKINGS & RATINGS

	<p>QS Stars University Ratings Excellent Award</p> <ul style="list-style-type: none"> Highest achievement among Public Universities in Malaysia 5-Stars rating for all criteria
	<p>2024 QS World University Rankings</p> <ul style="list-style-type: none"> Top 790 in World and 10 in Malaysia Ranked 1 in MTUN
	<p>2024 QS Asia University Rankings</p> <ul style="list-style-type: none"> Highest rank among Malaysia Technical University Network (MTUN) Top 153 in Asia, Top 35 in Southeast Asia and 13 in Malaysia
	<p>2024 QS World University Rankings by Subject</p> <ul style="list-style-type: none"> 1 Broad Subject (Engineering & Technology) and 6 Subjects have been ranked Top 250 in Chemical Engineering
	<p>2024 THE World University Rankings</p> <ul style="list-style-type: none"> Top 800 in World and 8 in Malaysia
	<p>2023 THE World University Rankings Asia</p> <ul style="list-style-type: none"> Ranked 166 in Asia and 8 in Malaysia
	<p>2023 THE Young World University Rankings</p> <ul style="list-style-type: none"> Top 146 in World and Top 3 in Malaysia
	<p>2024 THE World University Rankings by Subject</p> <ul style="list-style-type: none"> 4 Subjects (Business & Economics, Computer Science, Physical Sciences, Engineering) have been ranked
	<p>2021/2022 US News and World Report Best Global University Rankings</p> <ul style="list-style-type: none"> Top 992 in World, 269 in Asia and 8 in Malaysia 5 Subjects have been ranked & Top 161 in Energy & Fuel

Update: 17-Mei-2024

NATIONAL RANKINGS & RATINGS

	<p>Malaysia Research Assessment (MyRA)</p> <ul style="list-style-type: none"> Achieved 5-Star ratings since 2017
	<p>2022 MyMohes Ratings</p> <ul style="list-style-type: none"> Achieved 5-Star ratings since 2017
	<p>2022 SETARA Ratings</p> <ul style="list-style-type: none"> Very Competitive

SUSTAINABILITY RANKINGS

	<p>2023 Ui Green Metric World University Ranking</p> <ul style="list-style-type: none"> Top 68 in World and Top 4 in Malaysia
	<p>2023 THE Impact Rankings</p> <ul style="list-style-type: none"> Top 400 in World and 7 in Malaysia
	<p>2024 QS World University Rankings Sustainability</p> <ul style="list-style-type: none"> Top 565 in World and 12 in Malaysia
	<p>2022 SEDA Certificate</p> <ul style="list-style-type: none"> 3 Diamond Rating (out of 5 Diamond) Successfully achieved emission reduction of 37.82%

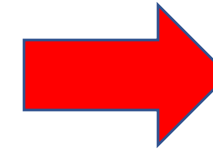
Ranked  in Malaysian Technical University Network (MTUN)

Source:Slaid Korporat UMPSA

FACTORS FOR TRANSFORMATION

1. Academic Development

Academic Programme



Student



TOTAL NUMBER OF STUDENT

STUDENT
16,152

Source : PPA, IPS & UMPA
Update: 2 May 2024

UNDERGRADUATE
10,528

POSTGRADUATE
1,426

LIFELONG LEARNING PROGRAMME
4,198

TOTAL OF INTERNATIONAL STUDENTS
484

COUNTRIES **32**

UNDERGRADUATE

170

POSTGRADUATE

314



Source:Slaid Korporat UMPSA

**Based on Academic Session 2021/2022

2. TVET EMPOWERMENT

**BACHELOR OF ENGINEERING
TECHNOLOGY**

15 PROGRAMS
3,596

STUDENT ENROLLMENT FOR TVET PROGRAMMES

7 PROGRAMS
369

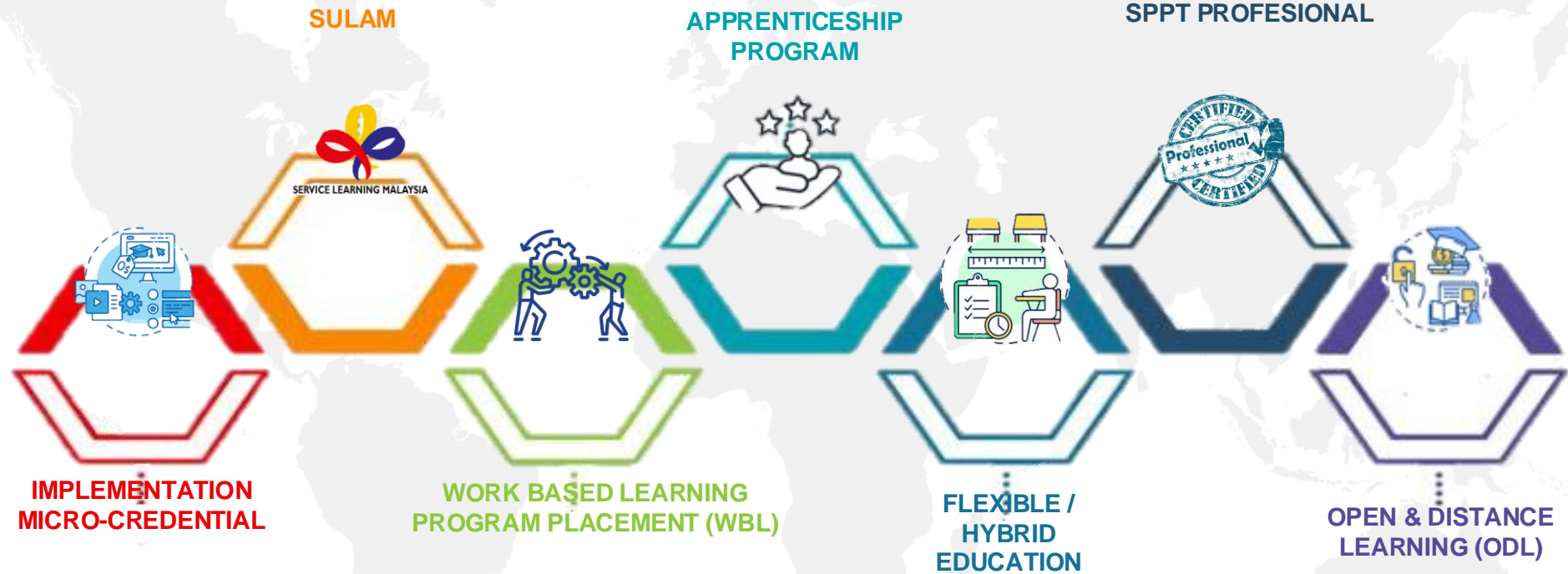
**BACHELOR OF
TECHNOLOGY**

**DIPLOMA IN ENGINEERING /
ENGINEERING
TECHNOLOGY**

5 PROGRAMS
1,481

Source: Slaid Korporat UMPSA

3. FLEXIBLE EDUCATION

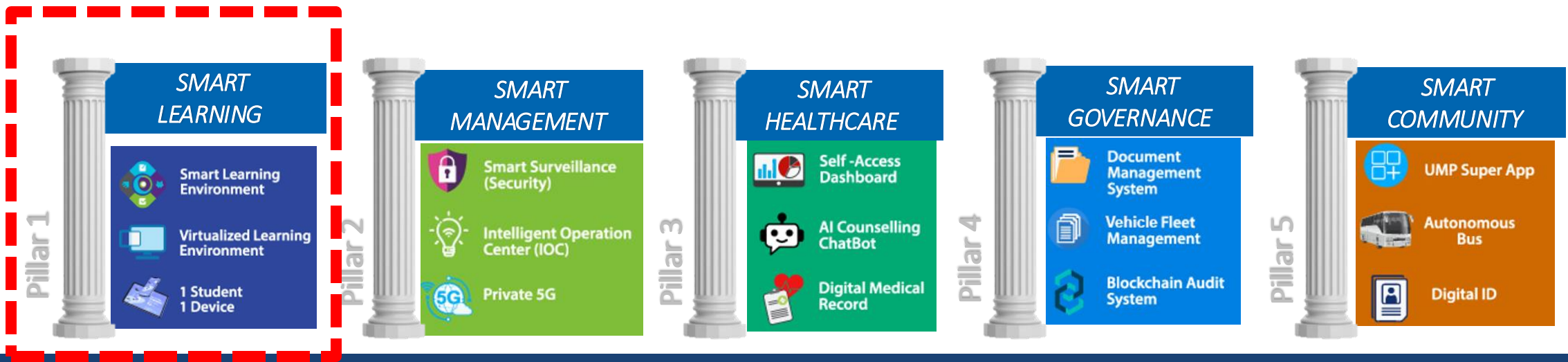


Source:Slaid Korporat UMPSA

4. UMPSA SMART CAMPUS



Source: Slaid Korporat UMPSA



UMPSA SMART CAMPUS IMPLEMENTATION

↓ ↓ ↓ ↓
HIGH IMPACT PROJECTS



5G Coverage



Smart Operations Center



UMPSA Super Apps



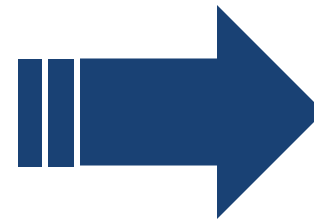
Virtual Desktop Infrastructure (VDI)



99% Wifi Coverage Residential Areas



Wi-Fi Access Point Each Room in the Student Residence



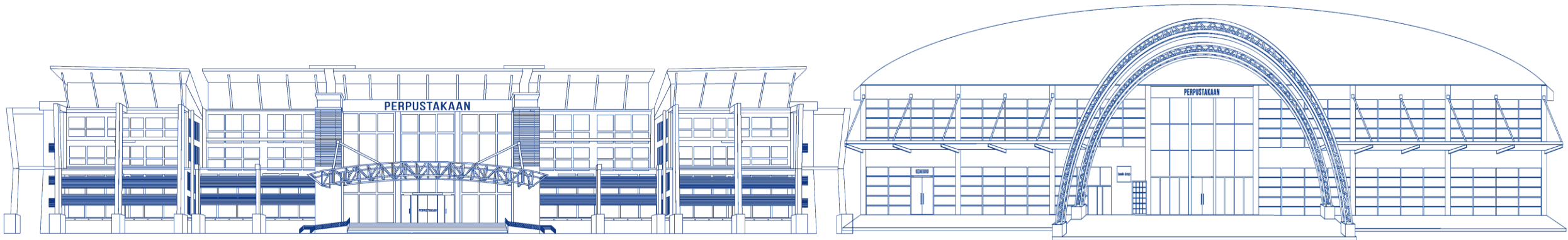
EXTENSION OF IMPLEMENTATION TO SMART CITIES



SMART CITIES

Source: Slaid Korporat UMPSA

UMPSA LIBRARY PERSPECTIVES: COLLECTION DEVELOPMENT (EBOOK)



Source Unit Media Collection, Library

EVOLUTION OF UMPSA LIBRARY

PERPUSTAKAAN UNIVERSITI MALAYSIA PAHANG AL-SULTAN ABDULLAH

30 MEI 2002



**PUSAT SUMBER,
UTM-KCP**

- Beroperasi di Indera Mahkota, Kuantan.
- Rumah berkembar *double-storey* yang diubah suai.
- Memuatkan 50 orang pengguna dalam satu masa.

24 APRIL 2003



**KNOWLEDGE MANAGEMENT
CENTER (KMC)**

- Bepindah ke Bandar MEC, Gambang.
- Berkeluasan 1,758 m².
- Menampung 300 orang pengguna dalam satu masa.

12 JANUARI 2009



**PERPUSTAKAAN UMP,
GAMBANG**

- Bepindah ke bangunan 2 tingkat.
- Berkeluasan 6,400 m².
- Mampu menampung 1,250 orang pengguna dalam satu masa.

1 MAC 2010



**BILIK BACAAN,
KAMPUS PEKAN**

- Bagi menampung pertambahan pelajar FKEE dan FKM.
- Berkeluasan 390 m².
- Memuatkan 120 orang pengguna dalam satu masa.

10 JANUARI 2012

**PERPUSTAKAAN UMP,
KAMPUS PEKAN**

- Bangunan 4 tingkat.
- Berkeluasan 16,000 m².
- Menampung 3,000 orang pengguna dalam satu masa.

14 APRIL 2023

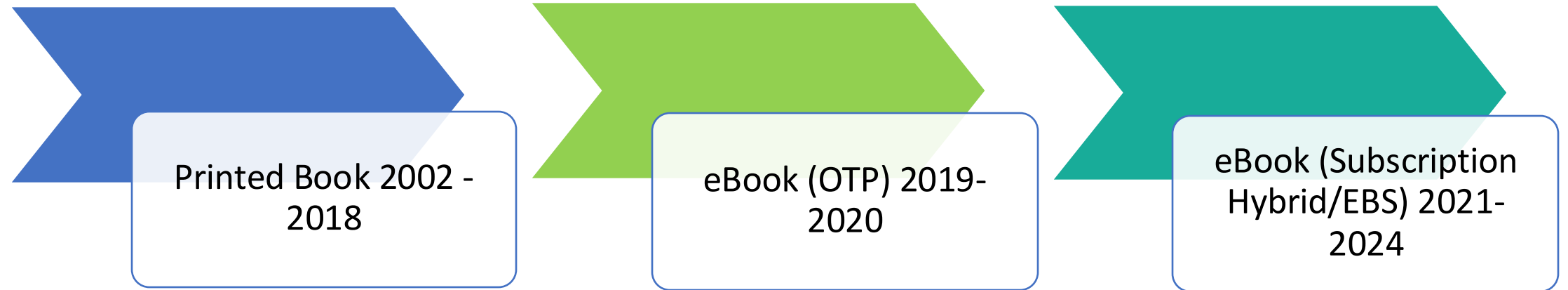
**PERPUSTAKAAN UMPSA
KAMPUS PEKAN**



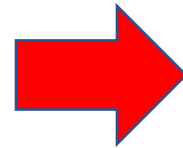
Sumber gambar: Koleksi Unit Media, Perpustakaan dan koleksi peribadi

<https://library.umpsa.edu.my/index.php/en/>

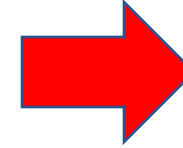
TRANSFORMATION OF COLLECTION DEVELOPMENT (EBOOK) IN UMPSA LIBRARY



Book Collection Budget
 Book Collection – 80K+
 printed copies



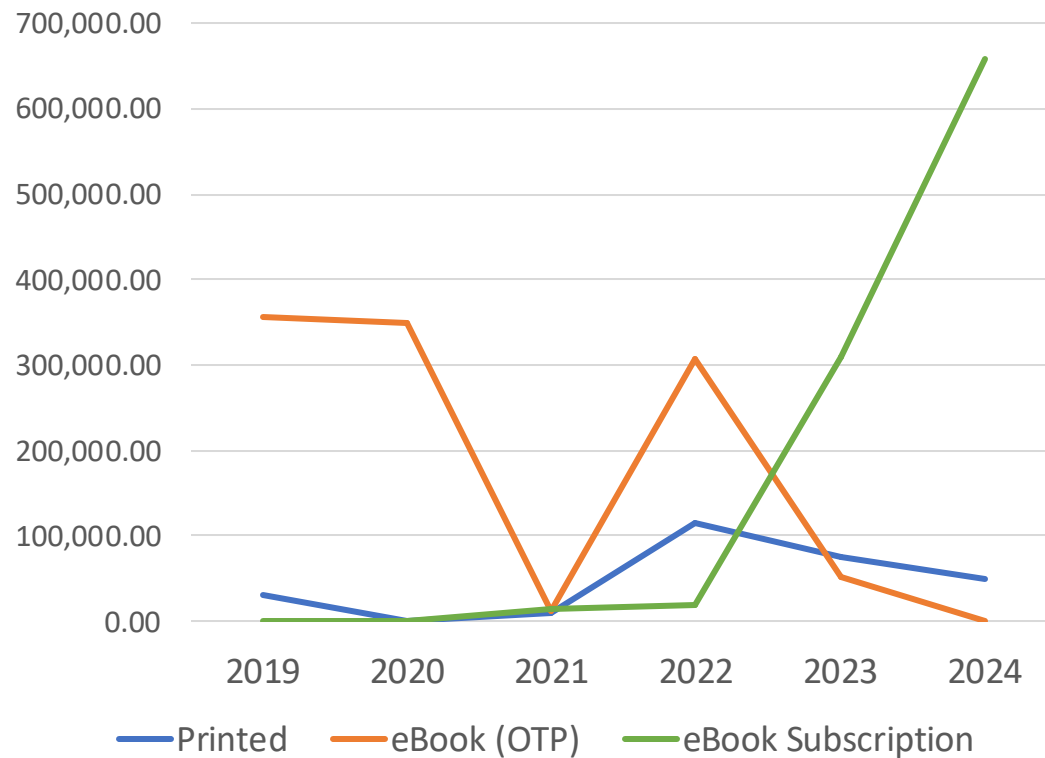
Book Collection Budget
 Book Collections -
 2k+ eBook (OTP only)
 181 printed book



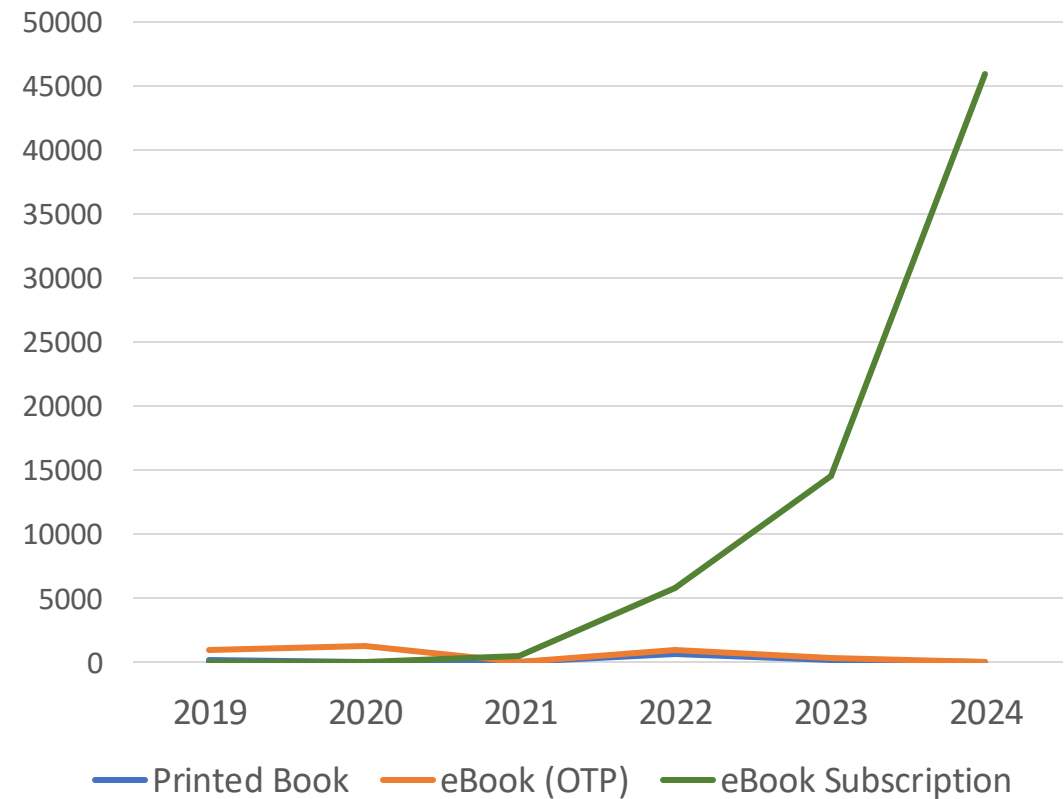
Book Collection Budget
 Book collections-
 1k+ Titles printed book
 1k+ Titles eBook (OTP)
 67K+ Titles eBooks subscription
 Model subscription and Hybrid EBS
 Platform – Access Engineering, Cengage,
 Knovel, **ScienceDirect Focus Hybrid
 eBook**

UMPSA LIBRARY BUDGET VS COLLECTION

Budget Trend on Collection Development (Book)



Collection Trend (Book)

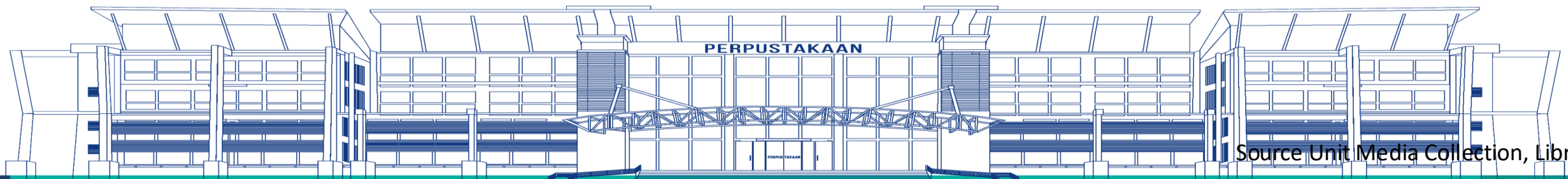


EBOOK IMPACT TO UMPSA LIBRARY

Budget

Format: Using Electronic Vs Printed book

Model: One Time Purchase (OTP), Subscription or Hybrid (EBS)

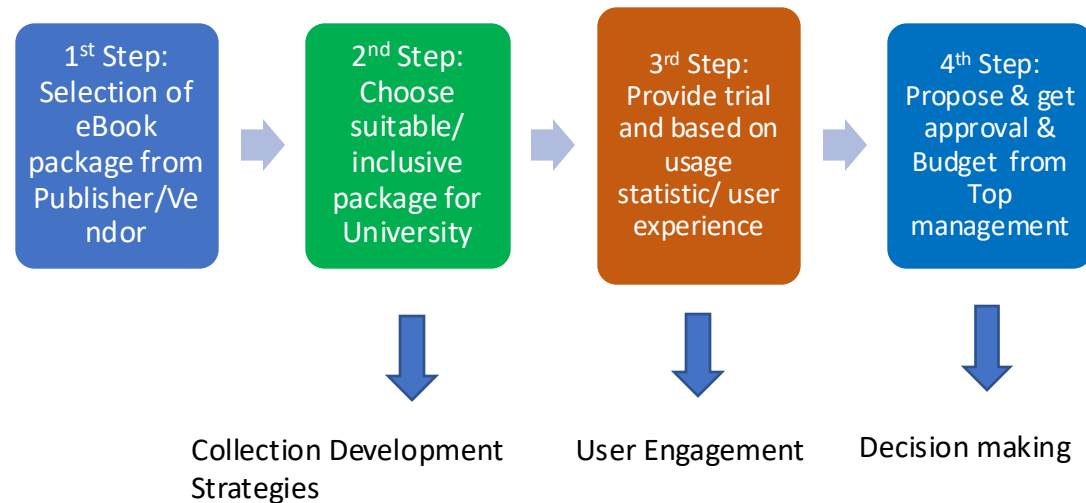


Source Unit Media Collection, Library

EBOOK IMPACT TO UMPSA LIBRARY

1. Data Driven Decision Making

- Assist to optimize our collection (eBook) based on **user preference** and **usage pattern**.

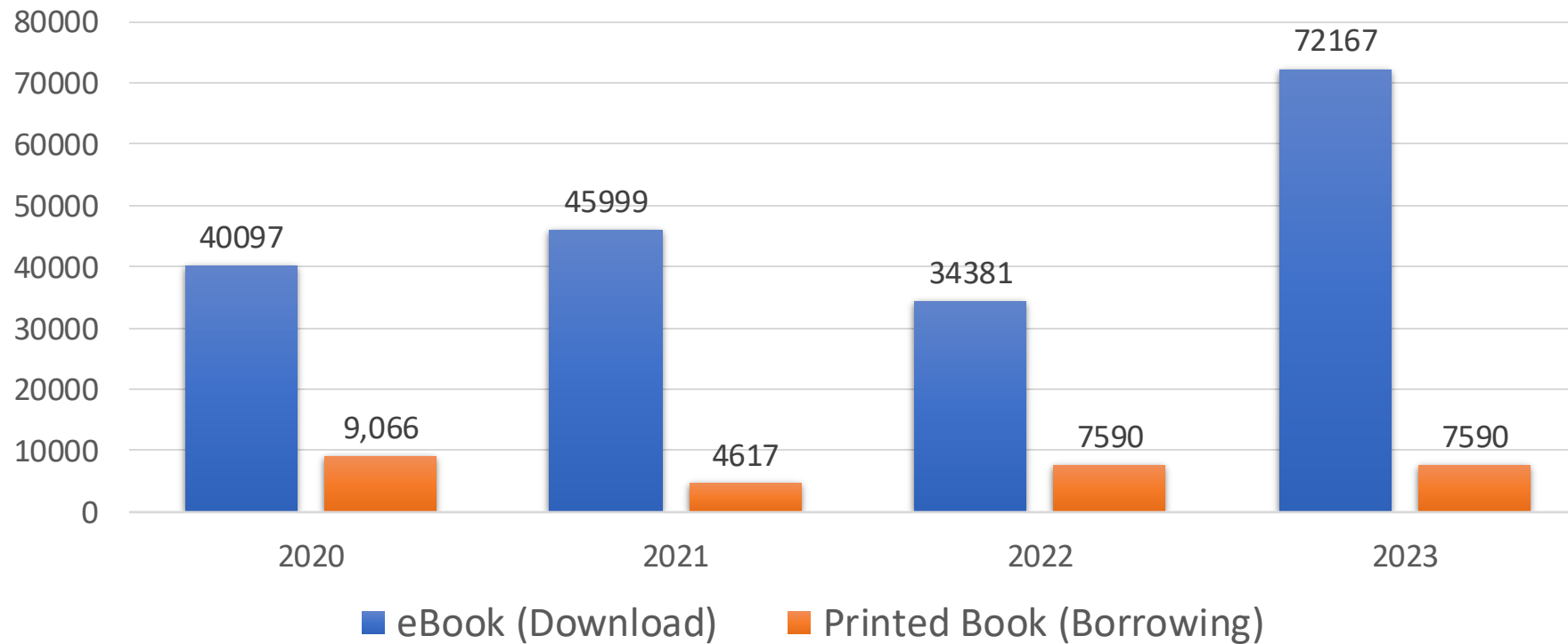


2. Accessibility

- Focusing on providing **diverse** and **inclusive collection** to meet user needs.
- Overcome the **limitation** of printed book in term of cost, copy, format, version, location.
- User friendly** searching mode with AI feature.
- Shortcut** in getting/ accessing the materials compared to accessing printed book.
- Access **24/7** at any where.

COMPARISON OF USAGE

eBook Usage vs Printed Book (Borrowing)

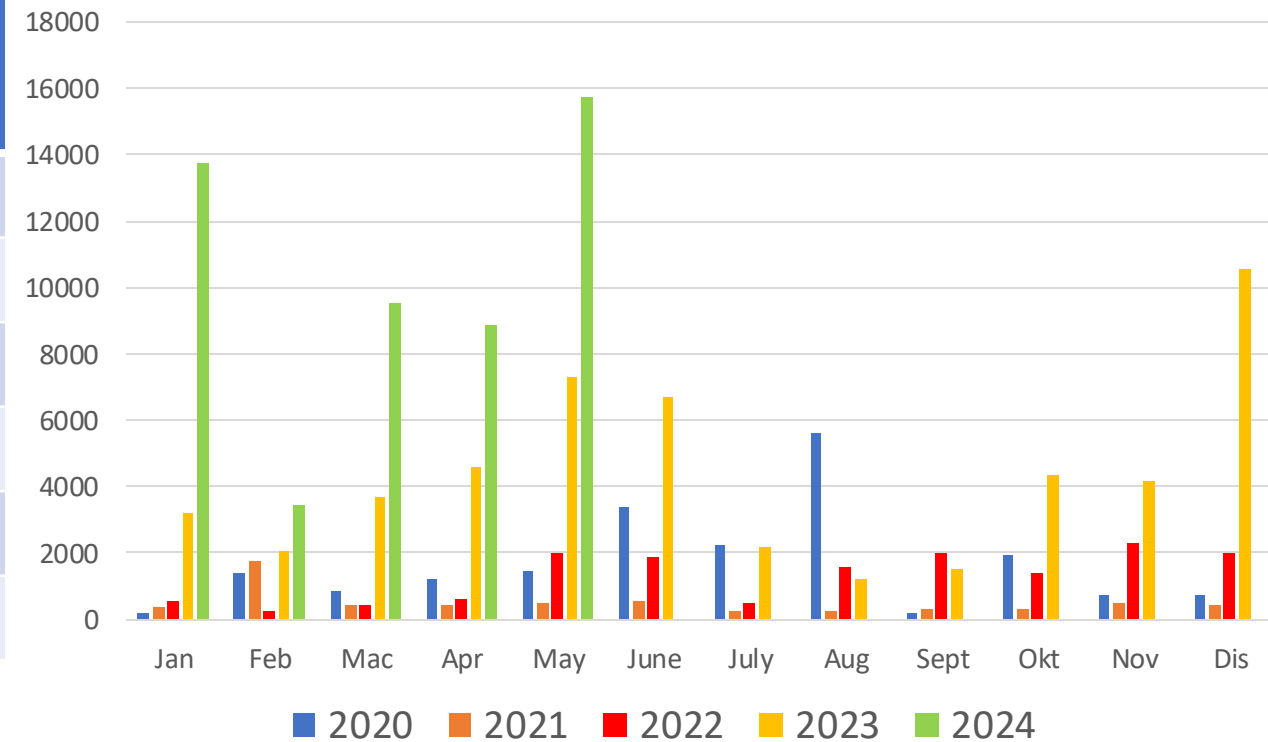


ScienceDirect eBook Collection Vs Usage

ScienceDirect eBook Collection

Year	Hybrid EBS Subscription & Gift MOHE (Titles)	Perpetual (Cumulative Titles)
2019	175 + 111	286
2020	87	373
2021	2	375
2022	5370 (106)	481
2023	10,754 (184)	665
2024	43,680 (?)	In Progress

Usage Statistic ScienceDirect eBook



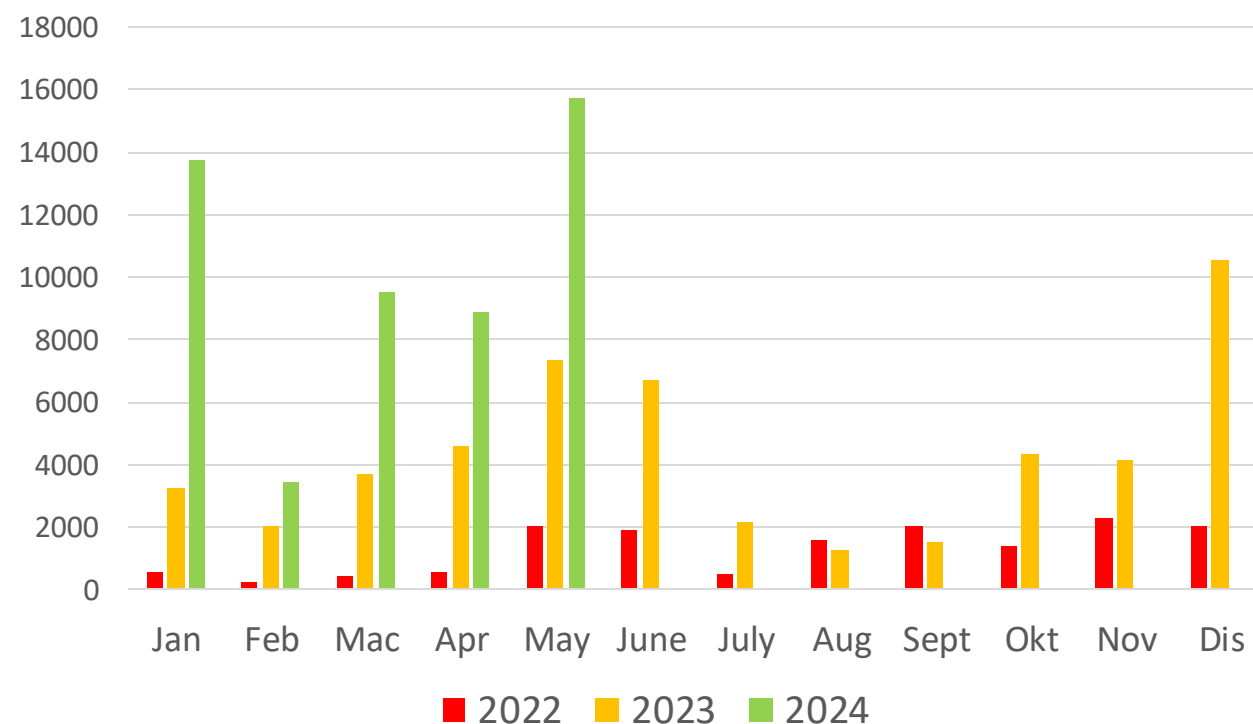
TRB1-Book Request (Excluding OA_Gold)

ScienceDirect Focus Hybrid Collection

Elsevier eBook Collection (EBS Model)

Year	Package	Titles
2022	Focus Hybrid- 1 subject Collection Engineering	5370 (106)
2023	Focus Hybrid- 4 subject Collection Engineering Chemical Engineering Materials Science Energy	10,574 (184)
2024	All Access Hybrid- 19 subject Collection	43,680

Usage ScienceDirect eBook- Focus Collection Hybrid



TRB1-Book Request (Excluding OA_Gold)

EBOOK IMPACT TO UMPSA LIBRARY

3. Collaborate with Academician & Academic Office on Course Outline Initiative

- We recommend ScienceDirect eBook to become reference in course outline.
- We work closely with faculties and Academic office to adopt eBook as the programme course outline.
- We conduct user training for academician with the support of Elsevier at the faculty to assist and expose them on how to adopt eBook as their programme course outline.

User Education Activity

Awareness & User Education Training (2022, 2023, 2024)

ToT (December 2023)

- Gambang – 15 participant
- Pekan – 10 participant
- FKOM – 35 participant
- Faculty Representative, Head of Program

Academician Training Gambang (Jan. 2024)

- FPI – 25 participant
- FSTI – 25 participant
- FTKA – 40 participant
- FTKKP – 30 participant

Academician Training Pekan 2024

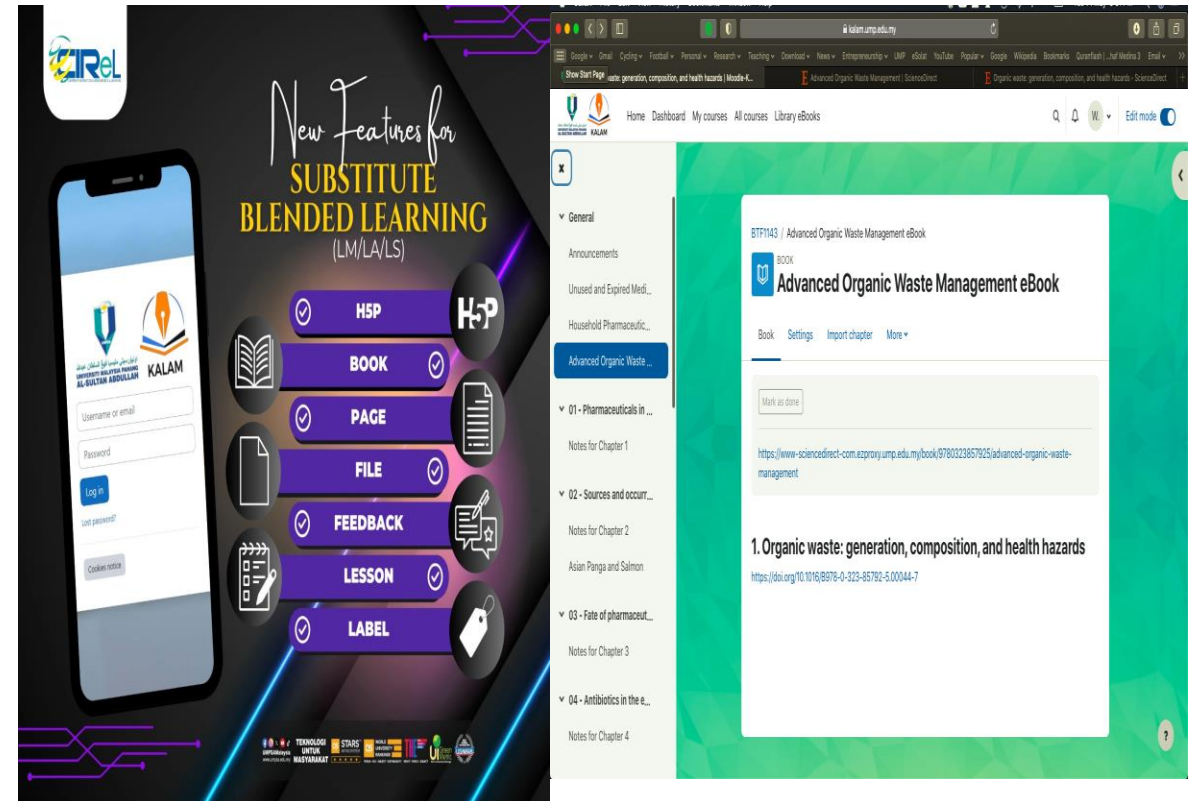
- In Process
- FTKEE
- FTKMA
- FTKPM

EBOOK IMPACT TO UMPSA LIBRARY

4. Integration eBook into Learning Management system

- Engage user by integrating eBook into UMPSA LMS (KALAM)
- Provide direct access to relevant eBooks within course materials enhances the learning experience for user (academician and student) to support academic success.
- Providing guidance to faculty and embed all type of eBook can be used as reference in their course outline.

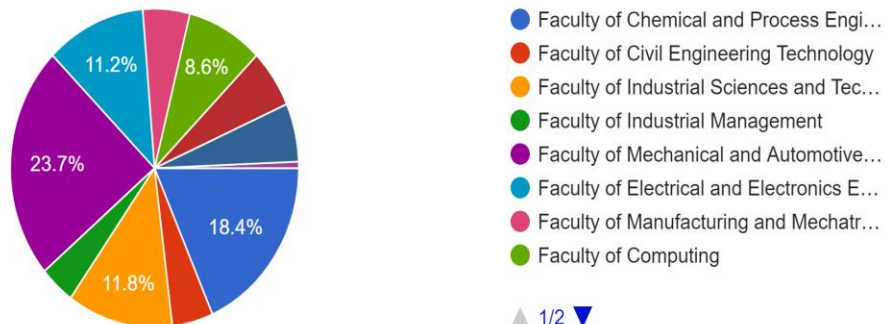
Example KALAM (LMS)



ScienceDirect EBOOK SURVEY (April 2024)

Faculty

152 responses

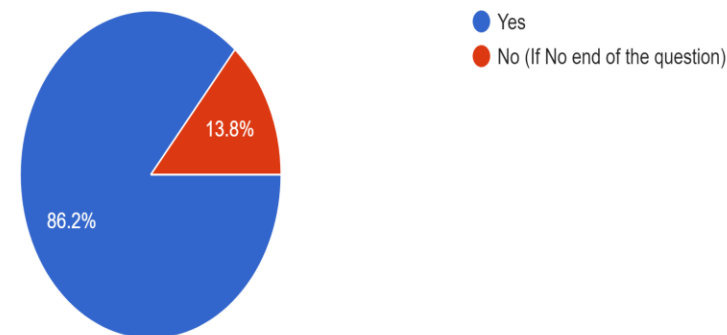


- Faculty of Chemical and Process Engi...
- Faculty of Civil Engineering Technology
- Faculty of Industrial Sciences and Tec...
- Faculty of Industrial Management
- Faculty of Mechanical and Automotive...
- Faculty of Electrical and Electronics E...
- Faculty of Manufacturing and Mechatr...
- Faculty of Computing

▲ 1/2 ▼

Do you know ScienceDirect eBook platform?

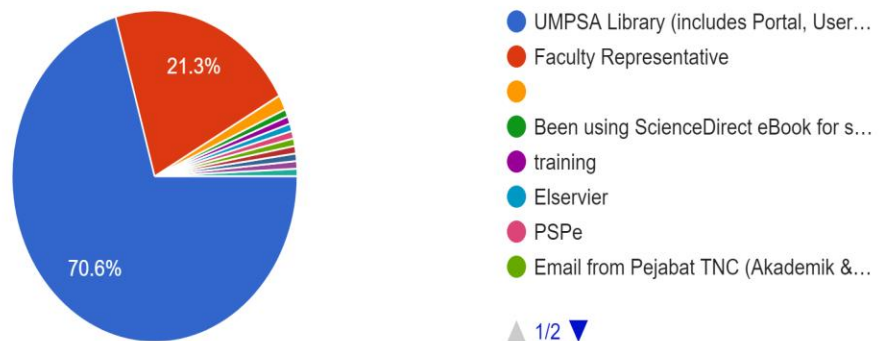
152 responses



- Yes
- No (If No end of the question)

How do you know about ScienceDirect eBook platform?

136 responses

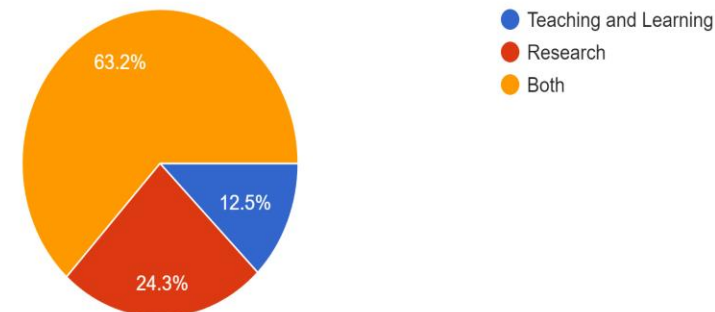


- UMPSA Library (includes Portal, User...)
- Faculty Representative
- Been using ScienceDirect eBook for s...
- training
- Elservier
- PSPe
- Email from Pejabat TNC (Akademik &...

▲ 1/2 ▼

What is your purpose of using ScienceDirect eBook?

152 responses

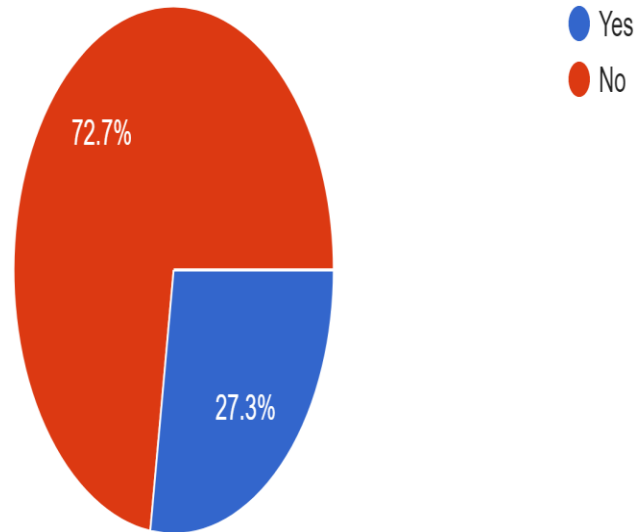


- Teaching and Learning
- Research
- Both

ScienceDirect EBOOK SURVEY (April 2024)

Do you use ScienceDirect eBook as a reference in your course outline?

139 responses



Program

BTC/BTB
 BTG3233 Rotating Equipment
 BSK1153 Analytical Chemistry
 BTD3123 FINITE ELEMENT ANALYSIS, ,
 BTD3243 STRESS ANALYSIS
 BTD3342 FATIGUE DESIGN & ANALYSIS
 BPS3213
 BTD
 BTK & BTO

 BTD (FTKMA)
 BVE2415 Electrical machines & Drives System integration

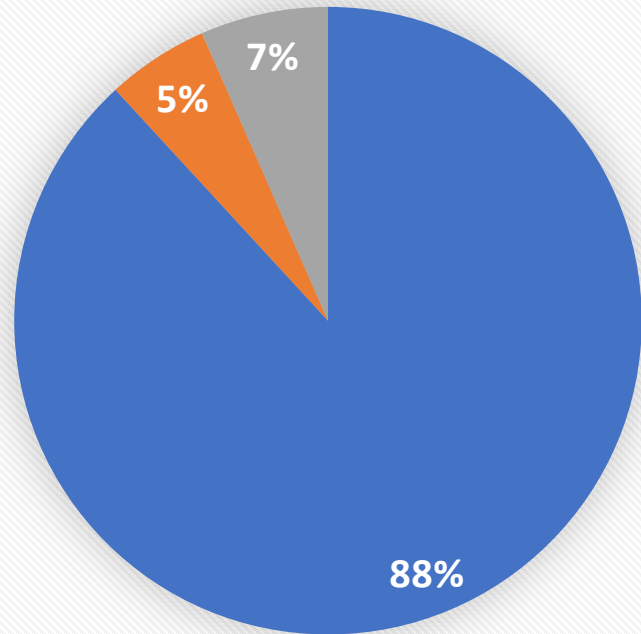
 BCS3233 Software Testing and Final Year Project
 Bsk3523 oleochemistry
 BAA

Subject

Introduction to Pharmaceutics
 Industrial Biotechnology
 Heat Transfer & Mechanical Design
 Industrial Biotechnology Program
 occupational safety and health
 Environmental Chemistry
 Spatial Science Engineering
 Nondestructive testing, failure analysis
 Autodesk Inventor Simulation
 Process Synthesis and Chemical Reaction
 Engineering
 Chemical engineering technology
 Process Control & Dynamic for Bachelor of
 Chemical Engineering programme
 Business Analytics
 Engineering Materials
 Introduction to human behavior, psychology
 in Quran and Sunnah
 Material Technology Programme
 Control System
 Materials Technology

ScienceDirect EBOOK SURVEY (April 2024)

What is your feedback using ScienceDirect eBook platform?



■ Positive Feedback ■ Negative Feedback ■ NA

No	Positive Feedback	Negative Feedback
1	It is very useful, because some of the topic that is not covered in a prime textbook (i.e. emerging topics/technologies) are available in the ScienceDirect eBook.	i dunno. I am not using it
2	The service should be continued in the future as it gives a good impact to the teaching, learning and researching.	The ebook platform doesn't have much contribution in my course outline
3	The books are listed according to major Engineering & Science grouping. For specific field of study, e.g. Finite Element Analysis, the books are listed haphazardly across core areas. User need to carefully search by title.	Need proper guide for student how to use effectively in their study.
4	Very useful for academic and research works	Never use
5	Great! Ebooks help me understand a topic better and complement the journals that i read.	Hope to have more variation of books especially books with case studies, exercises, with solutions.
6	It is very effective to use the platform since it can provide latest knowledge about that topic.	Access issues.
7	The eBook can be shared to KALAM. I even ask the students to read the book and make the summary as an assignment.	most of my go to topics are not listed in in the platform anyway
8	Help with my research and I am thinking to use as teaching material as well	Its a good platform however i have no time to practice yet
9	It is easier rather than finding a book on shelf.	
10	SD eBook is one of the germs source for pnp.	
11	I generally appreciate its extensive database, user-friendly interface, and features like advanced search options and citation management tools. Overall, this platform remains a valuable resource for researchers and academics especially in my field.	

CONCLUSION & FUTURE PLAN FOR UMPSA LIBRARY

1. Adopting eBook as Course Outline

2. Open Access & Open Educational Resources

3. Collaboration and Consortia

4. Stay Updated & Embrace Technology



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UNIVERSITI MALAYSIA PAHANG
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THANK YOU



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