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| *final logo jawi UTeM-01*  **FAKULTI PENGURUSAN TEKNOLOGI DAN TEKNOUSAHAWANAN**  **UNIVERSITI TEKNIKAL MALAYSIA MELAKA** | | |
| TECHNOLOGY ENTREPRENEURSHIP | | |
| **BTMW4012** | **SEMESTER I** | SESI 2022/2023 |

1. **LEARNING OUTCOMES**

Upon completion of this subject, the student should be able to:

LO1 Apply the concept and importance of entrepreneurship to real-world situation.(C3)

LO2 Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business.(P2)

LO3 Choose suitable business ideas and processes in developing a business plan for a small business.(A3).

#### SYNOPSIS

The subject provides students with technological knowledge about entrepreneurship as well as the skills to turn such knowledge into practice. The teaching and learning (T&L) activities include case studies and fieldwork with the aim to inculcate entrepreneurship values and entrepreneurship acculturation with a view to successfully launch and subsequently manage their enterprises. Students will be exposed to the support systems available or government agencies in starting new ventures, including the tactics commonly employed by entrepreneurs starting a business. The subject allows students to critically evaluate the business in terms of technical feasibility, investment potential, and risks.

### PRE-REQUISITE

None

### REFERENCES

1. Arifin, S. & Hamidon, S. (2017). *Introduction to Entrepreneurship*. Oxford Fajar.
2. Barringer, B. R. and Ireland, R. D. (2015). *Entrepreneurship: Successfully Launching New Ventures*. 5th International Edition, Pearson.
3. Barker, Melissa S (2013). Social media marketing : a strategic approach. South Western, OH : Cengage. Call Number HF5415.1265 .S62 2013
4. Ariffin, S., Wahab, I. A., Hambali, Z. (2013). *Fundamentals of Entrepreneurship*. Oxfort Fajar.
5. Scarborough, N. (2014). *Essentials of entrepreneurship and small business management*. Boston: Pearson.
6. UiTM Entrepreneurship Study Group. Revised Edition (2010). *Fundamentals of Entrepreneurship.*Pearson
7. **STUDENT LEARNING TIME (SLT)**



### ASSESSMENT MARKS

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessment Type** | **Detail Item** | | **Topics** | **Code** | **LO** | **PO** | **Marks** | **Weightage (%)** | **Total** |
| Course Work | Test | MCQ | Lecture 1, Lecture 2, Lecture 4,  Lecture 6,  Lecture 7 | MT-1 | LO1 | PO1 | 100 | 25 | 100% |
| Project 1 & 2 | Business Portfolio Report | Lecture 5,  Lecture 8, | PR 1 | LO2 | PO2 | 100 | 30 |
| Business Plan Report | Lecture 3  Lecture 9  Lecture 10  Lecture 11  Lecture 12 | PR 2 | LO3 | PO3 | 100 | 30 |
| Assignment 1: Business Sales | Personal Selling & Go-eCommerce Platform | Lecture 13  Lecture 14 | TG 1 | LO1 | PO1 | 10 | 15 |

### WEEKLY LECTURE PLAN

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| --- | --- | --- | --- |
| Week | **Contents** | | **Remarks** |
| 1 | Lecture 1  LO 1 | **Introduction to Entrepreneurship and Business environment**   * Concept of entrepreneurship * Entrepreneurial Process * Characteristics and attributes of entrepreneurs * Conventional Entrepreneurship vs Digital Entrepreneurship * Digital Entrepreneurship in Malaysia | * Briefing BTMW content & delivery method through Online using Webex & Facebook live FPTT * Student Enroll to U-learn according to Course’s Lecturer * Group selection * Discussion on Group & Individual Assignment   Video :  https://youtu.be/-sNdIKPxi0w |
| 2 | Lecture 2  LO1 | **Ideation and SEO**   * Idea generation and innovation * Techniques for generating business ideas * Search Engine Optimization (SEO) * Transformation of ideas into business opportunities * Business start-ups | * Online class using U-Learn * Discussion on lecture 1 topic * Student activity: * Identify 5 business ideas   Videos :  <https://youtu.be/3BDmykLr1iE> (I-Sajadah)  <https://www.youtube.com/watch?v=bNpx7gpSqbY>  <https://www.youtube.com/watch?v=QoqohmccTSc> |
| 3 | Lecture 3  LO3 | **Business Plan Models & BMC**   * Importance of Business Plan * Components of Business Plan * Business Model Canvas (BMC) | * Discussion   Video : <https://youtu.be/6JRCToNiTVQ> |
| 4 | Lecture 4  LO1 | **Formation and registration of business in Malaysia**   * Types of business entity * Ethics, Professionalism and social responsibility * Intellectual Property, trade secret, patents and copyright | * Online class using U-Learn * Discussion on lecture 2 topic * Student activity   - Select 1 business entity & justify  - Business Consultation with students   * Video : <https://youtu.be/6JRCToNiTVQ> |
| 5 | Lecture 5  LO2 | **Marketing Planning for Business Start ups - Part 1**   * Marketing concept * Marketing segment, target customers and positioning * Marketing plan * Marketing Mix | * Online class using U-Learn * Discussion on lecture 3 topic * Student activity   - Identify marketing mix for group selected product  - Business Consultation with students  Video :<https://youtu.be/nJ4uCOJjDF8> |
| 6 | Lecture 6  LO2 | **Marketing Planning for Business Start ups – Part 2**   * Social media in marketing * Facebook for business * Instagram for business * Google Ads * Marketing budget | * Online class using U-Learn * Discussion on lecture 4 topic * Student activity   - Develop social media platform (Insta)  - Business Consultation with students  Video : <https://www.youtube.com/watch?v=Yyq4X71H5Fw> |
| 7 | Lecture 7  LO1 | **Organizational management for business start-ups**   * Organizational mission, vision, and objectives * Organizational structure * Human resource management * Organizational financial planning | * Online class using U-Learn * Discussion on lecture topic * Student activity   - Develop organizational structure  - Business Consultation with students  Video: <https://youtu.be/ESU62zsvq8I>  **SUBMISSION:**  **18/11/2022 (Friday)Before 5 pm**   * **Business Sales Report & Go eCommerce Platform (15 Marks)** |
| MID TERM BREAK  26/11/2022 - 4/12/2022 | | | |
| 8 | Lecture 8  LO2 | **Project Management for Digital Entrepreneurship**   * Website development * Marketplace * Payment gateway | * Online class using U-Learn * Discussion on lecture 6 topic * Student activity   - Demostration using Lazada/Shopee  Video :  <https://www.youtube.com/watch?v=w9j3-ghRjBs> |
| 9 | Lecture 9  LO3 | **Operational Management for Business Start ups**   * Location planning * Process design, sourcing and layout * Production planning and capacity management * Operational budget | * **Continuous assessment-Mid Term Test (25 Marks)** * Online class using U-Learn * Discussion on lecture 7 topic * Student activity   - Prepare process design for group selected product  **ASSESSMENT:**   * **Mid Term Exam (25 Marks)** * **Group 1 (6/12/2022-Tuesday)** * **Group 2 (7/12/2022-Wednesday)** |
| 10 | Lecture 10  LO3 | **Financial Planning for Business start-ups**   * Individual financial planning * Cash flow * Profit and lost * Balance sheets | * Online class using U-Learn * Discussion on lecture 8 topic * Student activity   - Prepare Pro-forma Cash flow, Income statement & Balance Sheet  **SUBMISSION:**  **23/12/2022 (Friday)Before 5 pm**   * **Business Portfolio Submission (30 Marks)** |
| 11 | Lecture 11  LO3 | **One to One Group Consultation with Lecturer Part 1**   * Business Plan Assessment * Business Portfolio Assessment * Business Sales Assessment | * **Online Class (Synchronous Lecture)**     **SUBMISSION:**  **30/12/2022 (Friday)Before 5 pm**   * **Business Plan Submission (30 Marks)** |
| 12 | Lecture 12  LO1 | **One to One Group Consultation with Lecturer Part 2**   * Business Plan Assessment * Business Portfolio Assessment * Business Sales Assessment | * **Online Class (Synchronous Lecture)** |
| 13 | Lecture 13  LO2 | **One to One Group Consultation with Lecturer Part 3**   * Business Plan Assessment * Business Portfolio Assessment * Business Sales Assessment | * **Online Class (Synchronous Lecture)** |
| 14 | Lecture 14  LO2 | **Reflection**   * Leading ventures to success * Reflections & Closure | * **Online Class (Synchronous Lecture)** |
| 15 |  | REVISION WEEK |  |

1. **STAFF**

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**APPROVAL OF TEACHING PLAN**

Prepared by: Approved by:

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…………………………. ………………………………..

Name : Dean/DD (Academic /HOD

Official stamp: Official stamp:

Date : 27-9-2022 Date:

**VERIFICATION ON THE IMPLEMENTATION OF TEACHING PLAN**

**(MID SEMESTER BREAK)**

Comments:

Reviewed by:

………………………………..

Dean/DD (Academic) /HOD

Official stamp: Date:

**VERIFICATION ON THE IMPLEMENTATION OF TEACHING PLAN**

**(WEEK 16)**

Comments:

Reviewed by:

………………………………..

Dean/DD (Academic) /HOD

Official stamp: Date:

LEARNING OUTCOMES VS PROGRAM OUTCOMES (FPTT) – BTEC, BTMM, BTMI, BTMS

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| **No** | **Learning Outcomes** | **PO1** | **PO2** | **PO3** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | x |  |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) |  | x |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). |  |  | x | Lecture | Business Plan Project |

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| **PROGRAM OUTCOME:** | **BTEC- Technopreneurship** | **BTMM - High Tech Marketing** | **BTMI - Technology Innovation** |
| PO1 | To acquire technopreneurship knowledge | To acquire high technology marketing knowledge | To acquire technology innovation knowledge |
| PO2 | To be able to identify, analyze problems and make appropriate decisions in technopreneurship | To be able to identify, analyze problems and make appropriate decisions in high technology marketing | To be able to identify, analyze problems and make appropriate decisions in technology innovation |
| PO3 | To foster the ability to apply and practice management and technology skills | To foster the ability to apply and practice management and technology skills | To foster the ability to apply and practice management and technology skills |
| PO4 | To have the ability to communicate effectively with all entrepreneurial stakeholders | To have the ability to communicate effectively throughout the marketing supply chain | To have the ability to communicate effectively within current innovation trend |
| PO5 | To instill social responsibility as an individual or as a group | To instill social responsibility as an individual or as a group | To instill social responsibility as an individual or as a group |
| PO6 | To acknowledge the needs of lifelong learning in technopreneurship | To acknowledge the needs of lifelong learning in high technology marketing | To acknowledge the needs of lifelong learning in technology innovation |
| PO7 | To nurture the development of effective technopreneur or workers for technopreneurial sector | To develop skilled workers with enterprising culture. | To develop skilled workers with enterprising culture. |
| PO8 | To practice the knowledge learned professionally and ethically | To practice the knowledge learned professionally and ethically | To practice the knowledge learned professionally and ethically |
| PO9 | To nurture the development of effective leaders with high integrity in technopreneurial sector | To nurture the development of effective leaders with high integrity in high technology marketing | To nurture the development of effective leaders with high integrity in technology innovation |

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FKP) – BMCG, BMFR, BENG, BEKG, BITG, BMFS, BMFB, BFMA | | | | | | |
| **No** | **Learning Outcomes** | | | **PO9** | **P11** | **PO12** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | | |  | x |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) | | | x |  |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). | | |  |  | x | Lecture | Business Plan Project |

**PROGRAM OUTCOME:**

PO1: Able to apply knowledge of mathematics, science, engineering fundamentals and manufacturing engineering to the solution of complex engineering problems.

PO2: Able to identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3: Able to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4: Able to conduct investigation into complex problems using research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

PO5: Able to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations.

PO6: Able to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice

PO7: Able to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PO8: Able to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PO9: Able to communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10: Able to demonstrate knowledge and understanding of engineering and management principles and apply these to ones own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11: Able to recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change and acquire knowledge on entrepreneurship

PO12: Able to demonstrate knowledge and understanding of the principles of finance and project management

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FTMK) – BITS, BITD, BITM, BITC, BITI, BITZ, BITE | | | | | | |
| **No** | **Learning Outcomes** | | |  | **PO9** | **PO9** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | | |  |  | x | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) | | |  | x |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). | | |  | x |  | Lecture | Business Plan Project |

**PROGRAM OUTCOME:**

PO1: Able to acquire and apply knowledge in computer science and information technology.

PO2: Able to analyze, design and develop ICT applications.

PO3: Can use artificial intelligence techniques such as search techniques, fuzzy logic, neural networks, evolutionary computing, machine learning, and intelligent agents when developing a system.

PO4: Equipped with skills to develop systems individually or in groups based on artificial intelligence such as smart systems, expert systems, intelligent agent systems and robot systems.

PO5: Able to conduct research in related fields and based on artificial intelligence.

PO6: Able to think creatively and critically in problem solving and communicate effectively to convey ideas.

PO7: Able to contribute skills individually or as a group to different disciplines and domains.

PO8: Able to demonstrate good personal, ethical, leadership and entrepreneurial skills.

PO9: Able to carry out his own learning continuously to gain knowledge and skills.

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FTKEE) – BEEI, BEEA, BEEY, BEET, BEEE,BEEC,BEEZ | | | | | | |
| **No** | **Learning Outcomes** | | | **PO2** | **PO5** | **PO10** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | | | x |  |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) | | |  | x |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). | | |  |  | x | Lecture | Business Plan Project |

**PROGRAM OUTCOME**

PO1: Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization to the solution of complex electrical and electronics engineering problems.

PO2: Identify, formulate, conduct research literature and analyze complex electrical and electronics engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences

PO3: Design solutions for complex electrical and electronics engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4: Conduct investigation of complex electronics/electrical engineering problems using research-based knowledge and research methods including design of experiments, analysis, and interpretation of data, synthesis of information to provide valid conclusions

PO5: Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering problems, with an understanding of the limitations

PO6: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.

PO7: Understand and evaluate the sustainabilty and impact of professional engineering work in the solutions of complex engineering problems in societal and environmental contexts.

PO8: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice..

PO9: Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

PO10: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions..

PO11: Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.

PO12: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FTKMP) BMMA, BMMH, BMMM, BMMV | | | | | | |
| **No** | **Learning Outcomes** | | | **PO2** | **PO5** | **PO10** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | | |  | x |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) | | | x |  |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). | | |  |  | x | Lecture | Business Plan Project |

**PROGRAM OUTCOME:**

PO1: Ability to apply knowledge of mathematics, science, engineering fundamentals and engineering specialisation principles to defined and applied engineering procedures, processes, systems or methodologies in the field of mechanical engineering technology.

PO2: Ability to solve broadly-defined engineering problems systematically to reach substantiated conclusions, using tools and techniques appropriate to mechanical engineering technology

PO3: Ability to design solutions for broadly-defined engineering technology problems, and to design systems, components or processes to meet specified needs with appropriate consideration for public health and safety, as well as cultural, societal, environmental and sustainability

PO4: Ability to plan and conduct experimental investigations of broadly-defined problems, using data from relevant sources

PO5: Ability to select and apply appropriate techniques, resources and modern engineering tools, with an understanding of their limitations

PO6: Ability to function effectively as individuals, and as members or leaders in diverse technical teams

PO7: Ability to communicate effectively with the engineering community and society at large

PO8: Ability to demonstrate an awareness of and consideration for societal, health, safety, legal and cultural issues and their consequent responsibilities.

PO9: Ability to demonstrate an understanding of professional ethics, responsibilities and norms of engineering technology practices.

PO10: Ability to demonstrate an awareness of management, business practices and entrepreneurship.

PO11: Ability to demonstrate an understanding of the impact of engineering practices, taking into account the need for sustainable development.

PO12: Ability to recognise the need for professional development and to engage in independent and lifelong learning.

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FKE) BEKG, BEKM | | | | | |
| **No** | **Learning Outcomes** | **PO9** | **PO11** | **PO12** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) |  | x |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) | x |  |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). |  |  | x | Lecture | Business Plan Project |

**PROGRAM OUTCOME:**

1. Ability to apply knowledge of mathematics, science, engineering fundamentals and an electrical/mechatronics engineering to the solution of complex electrical and related engineering problem. (K,A)
2. Ability to identify, formulate, research literature and analyse complex electrical/mechatronics engineering problems reaching substantiated conclusion. (K,S,A)
3. Ability to design solutions for complex electrical/mechatronics engineering problems and design systems or components or processes that meet requirement with appropriate consideration for public health and safety, cultural, societal, and environmental. (K,S,A)
4. Ability to conduct investigation into complex electrical/mechatronics engineering problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions. (K,S,A)
5. Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations. (K,S)
6. Ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice. (K,A)
7. Ability to demonstrate the understanding for impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge and need for sustainable development. (K,A)
8. Ability to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice. (K,A)
9. Communicate effectively on complex engineering activities with the engineering community and with society at large through presentation or technical writing. (S,A)
10. Ability to function effectively either as a member or a leader in a team and in multi- disciplinary environment. (S,A)
11. Ability to recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. (K,A)
12. Ability to demonstrate knowledge and understanding of engineering economics, management principles and entrepreneurship skills as applied in the electrical engineering profession. (K,A)

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|  | LEARNING OUTCOMES VS PROGRAM OUTCOMES (FKEKK) BENG, | | | | | |
| **No** | **Learning Outcomes** | **PO6** | **PO11** | **PO12** | **Delivery** | Assessment |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) | x |  |  | Lecture | Individual Sales Assignment & Test |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) |  | x |  | Lecture | Portfolio Project |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). |  |  | x | Lecture | Business Plan Project |

**PROGRAM OUTCOME:**

PO1: Apply knowledge of mathematics, science, engineering and electronics fundamentals to solve complex engineering problems.

PO2: Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3: Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public heakth ad safety, cultural, societal, and environmental consideration.

PO4: Conduct investigation into complex problems using research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

PO5: Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PO6: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.

PO7: Understand the impact of professional engineering solution in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PO8: Apply ethical principles and commit to professional ethics, responsibilities and norms of engineering practice.

PO9: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10: Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

PO11: Recognize the needs for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PO12: Demonstrate knowledge and understanding of engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

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| **LEARNING OUTCOMES VS LEARNING TAXONOMY** | | | | | | | | | | | | | | | | | | |
| **NO** | **Learning Outcomes** | **COGNITIVE** | | | | | | **PSYCHOMOTOR** | | | | | | **AFFECTIVE** | | | | |
| C1 | C2 | C3 | C4 | C5 | C6 | P1 | P2 | P3 | P4 | P5 | P6 | A1 | A2 | A3 | A4 | A5 |
| **1** | Apply the concept and importance of entrepreneurship toreal world situation. (C3) |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2** | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |
| **3** | Choose suitable business idea and process in developing a business plan for small business (A3). |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COGNITIVE | | | | | |
| C1: Knowledge | C2: Comprehension | C3: Application | C4: Analysis | C5:  Synthesis | C6:  Evaluation |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PSYCHOMOTOR | | | | | | |
| P1:  Perception | P2:  Set | P3:  Guided Response | P4:  Mechanism | P5:  Complex Overt Response | P6:  Adaptation | P7:  Origination |

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| AFFECTIVE | | | | |
| A1: Receiving | A2: Responding | A3: Valuing | A4: Organizing | A5:  Internalising values |

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| LEARNING OUTCOMES VS SOFT SKILLS |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Learning Outcomes** | **CS** | | | | | **CTPS** | | | | | **EM** | | | **ES** | | | **K** | **LL** | | | **LS** | | **TS** | | | | | |
| **1** | **2** | **3** | **4** | **5** | **1** | **2** | **3** | **4** | **5** | **1** | **2** | **3** | **1** | **2** | **3** | **1** | **1** | **2** | **3** | **1** | **2** | **3** | **1** | **2** | **3** | **4** | **5** |
| 1 | Apply the concept and importance of entrepreneurship toreal world situation. (C3) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Demonstrate the techniques in digital entrepreneurship practiced by entrepreneurs to market a business (P2) |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Choose suitable business idea and process in developing a business plan for small business (A3). |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| 1. Communication skill (CS) |
| 2. Critical thinking and problem solving skill (CTPS) |
| 3. Ethic and moral (EM) |
| 4. Entrepreneurial skill (ES) |
| 5. Knowledge Skill (K) |
| 6. Life long learning and information management (LL) |
| 7. Leadership skill (LS) |
| 8. Technical & Practical Skill (TPS) |
| 9. Teamwork skill (TS) |