**Table 3: Summary of information on each course**

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| 1. | Name of Course: | | **MATEMATIK TEKNOLOGI I** | |
| 2. | Course Code: | | WMT5022 | |
| 3. | Names of academic staff: | | Jabatan Pendidikan Umum | |
| 4. | Rationale for the inclusion of the course in the programme:  Pelajar dapat didedahkan dengan pengetahuan tentang konsep matematik serta menghubungkaitkan pengetahuan tersebut di dalam penyelesaian masalah dalam bidang teknologi. | | | |
| 5. | Semester and Year offered: | | | Year 1 Semester 1 |
| 6. | Total Student Learning Time (SLT):   |  |  |  | | --- | --- | --- | | Category of Activities | Learning Activity | Total Hours/ Semester | | Guided learning | Lecture | 14 | | Tutorial/Practical | 28 | | Student centered learning activities | 0 | | Self learning | Preparation for assignments/projects | 16 | | Independent study/revision | 14 | | Preparation for assessment | 4 | | Formal assessments | Continuous assessments | 2 | | Final examination sitting | 2 | | Total SLT | | **80** | | | | |
| 7. | Credit Value: | | 2 credits | |
| 8. | Prerequisite (if any): | | None | |
| 9. | Course Learning Outcomes (CLO): | | | |
|  | CLO1 | Mengaplikasikan teorem Matematik dalam menyelesaikan masalah berkaitan.(C3,PLO1) | | |
|  | CLO2 | Mengamalkan kemahiran asas Matematik dalam menyelesaikan masalah berkaitan.(P3,PLO2) | | |
|  | CLO3 | Mengenalpasti teorem Matematik dalam dalam menyelesaikan masalah berkaitan.(A1, PLO3) | | |
| 10. | Transferable Skills (Skills and how they are developed and assessed, project and practical experience and internship): | | | |
|  | PLO3 | Kemahiran berfikir secara kritis dan menyelesaikan masalah boleh diterapkan melalui Tutorial. | | |
| 11. | Teaching-learning and assessment strategies:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | CLO | | Method of delivery | Method of assessment | KPI | | CLO1 | Mengaplikasikan konsep dan prinsip Matematik dalam menyelesaikan masalah dengan tepat dan betul.(C3,PLO1) | Lectures & Student Centered Learning Activities | Quizzes, Tutorial, Test and Final Examination | 50% marks and above | | CLO2 | Menggunakan pengetahuan dan kemahiran Matematik dalam menyelesaikan masalah dengan tepat dan betul.(P3,PLO2) | Lectures & Student Centered Learning Activities | Tutorial | 50% marks and above | | CLO3 | Mengenalpasti masalah Matematik dalam menyelesaikan masalah dengan tepat dan betul.  (A1, PLO3) | Lectures & Student Centered Learning Activities | Tutorial and | 50% marks and above | | | | |
| 12. | Course Synopsis:  Kandungan modul ini bertujuan memperkenalkan kepada pelajar tentang keseluruhan konsep matematik. Kurikulum modul ini bermatlamat memperkembangkan individu yang mempunyai pemikiran matematik, berketrampilan mengaplikasikan pengetahuan matematik dengan berkesan dan bertanggungjawab dalam menyelesaikan masalah serta membuat keputusan, supaya berupaya menangani cabaran dalam kehidupan harian. | | | |
| 13. | Mode of Delivery (e.g. Lecture, Tutorial, Workshop, Seminar etc):  Lecture, Tutorial and Student Centred Learning | | | |
| 14. | Assessment Methods and Types:  Quizzes, Tutorial and Final Examination   |  |  |  | | --- | --- | --- | | Bil. | Kaedah Penilaian | Markah | | 1 | Pentaksiran Berterusan | 60% | |  | a. Kuiz (20%) |  | |  | b. Tutorial (40%) |  | | 2 | Penilaian Akhir | 40% | |  | Jumlah | 100% | | | | |
| 15. | Mapping of the course to the Programme Educational Objectives (PEO):   |  |  |  |  | | --- | --- | --- | --- | | PEO1 | PEO2 | PEO3 | PEO4 | | X |  | X |  | | | | |
| 16. | Mapping of the course to the Programme Learning Outcomes (PLO):   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | | X | X | X |  |  |  |  |  |  | | | | |
| 17. | Content outline of the course and the SLT (lecture hours) per topic:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Week | Topic | | | SLT (hrs) | | 1 - 3 | 1.0 | Bentuk Piawai | | 9 | |  |  | 1.1 | Memahami dan menggunakan konsep bentuk piawai untuk  menyelesaikan masalah dengan menggunakan kalkulator saintifik. |  | | 4 - 6 | 2.0 | Fungsi | | 9 | |  |  | 2.1 | Memahami konsep hubungan dan fungsi. |  | |  |  | 2.2 | Memahami konsep fungsi gubahan |  | | 7 - 10 | 3.0 | Pembezaan | | 12 | |  |  | 3.1 | Menggunakan konsep terbitan pertama bagi fungsi polinomial untuk menyelesaikan masalah. |  | |  |  | 3.2 | Melaksanakan pembezaan fungsi trigonometri. |  | |  |  |  |  |  | | 11 - 14 | 4.0 | Pengamiran | | 12 | |  |  | 4.1 | Menggunakan konsep kamiran tak tentu untuk menyelesaikan masalah. |  | |  |  | 4.2 | Menggunakan konsep kamiran tentu untuk menyelesaikan  masalah. |  | |  |  | 4.3 | Melaksanakan pengamiran untuk fungsi trigonometri. |  | | | | |
| 18. | Main and additional references supporting the course:  1. Applied Mathematics for business, economics, life sciences and social sciences.by Barnett, Raymond A. 1996 | | | |
| 19. | Other additional information: - | | | |