

BACHELOR OF SCIENCE (INDUSTRIAL MATHEMATICS) SSCMH 2020/2021

| SEMESTER 1 | | | SEMESTER 2 | | |
|--|--|-----------|------------------------------------|--|-----------|
| Code | Name of Course | cr | Code | Name of Course | cr |
| UHS 1022 | <i>Falsafah dan Isu Semasa</i> | 2 | SSCM 1033 | Mathematical Methods II | 3 |
| SSCM 1002 | Introduction to Industrial Mathematics Program | 2 | SSCM 1313 | Computer Programming | 3 |
| SSCM 1023 | Mathematical Methods I | 3 | SSCM 1523 | Linear Algebra | 3 |
| SSCM 1103 | Statistics | 3 | SSCM 1703 | Differential Equations I | 3 |
| SSCM 1303 | Computer Literacy | 3 | UHLB 1112 | English Communication Skills | 2 |
| SSCP 1143/ SSCC 1003 | Mechanics / Principles of Chemistry | 3 | UHMS 1182 | <i>Penghayatan Etika dan Peradaban*</i> | 2 |
| | | | UHMS 1182 | <i>Penghayatan Etika dan Peradaban*</i> | 2 |
| | | | UHS 1022 | <i>Falsafah dan Isu Semasa*</i> | |
| | | | UBSS 1032 | Introduction to Entrepreneurship | |
| Total Credit Hours | | 16 | Total Credit Hours | | 18 |
| *UHMS 1182 : Local Student | | | | | |
| *UHS 1022 or UHMS 1182 : Foreign Student | | | | | |
| SEMESTER 3 | | | SEMESTER 4 | | |
| Code | Name of Course | cr | Code | Name of Course | cr |
| SSCM 2103 | Mathematical Statistics | 3 | SSCM 2043 | Mathematical Methods III | 3 |
| SSCM 2423 | Numerical Methods I | 3 | SSCM 2613 | Advanced Calculus | 3 |
| SSCM 2773 | Differential Equations II | 3 | SSCM 2803 | Mathematical Modelling I | 3 |
| SSCM 2793 | Vector Calculus | 3 | SSCM 2833 | Linear Programming | 3 |
| SSCM 3533 | Set Theory and Logic | 3 | UHMT 1012 | Graduate Success Attributes | 2 |
| UHIT 2302 | Science and Technology Thinking | 2 | UHLB 2122 | <i>Academic Communication Skills</i> | 2 |
| Total Credit Hours | | 17 | Total Credit Hours | | 16 |
| SEMESTER 5 | | | SEMESTER 6 | | |
| Code | Name of Course | cr | Code | Name of Course | cr |
| SSCM 3133 | Statistical Quality Control | 3 | UKQT 3001 | Extra – Curricular Experiential Learning (ExCEL) | 1 |
| SSCM 3803 | Mathematical Modelling II | 3 | UHL* 1112 | Language Skills Elective | 2 |
| UHLB 3132 | Professional Communication Skills | 2 | UKQF 2082 | Community & Science | 2 |
| U*** 2**2 | Soft Skills Elective | 2 | SSCM 3103 | Design of Experiments | 3 |
| | | | SSCM 3423 | Numerical Methods II | 3 |
| Electives (Choose 6 credits) | | | Elective (Choose 6 credits) | | |
| SSCM 2673 | Discrete Mathematics | 3 | SSCM 3123 | Multivariate Analysis | 3 |
| SSCM 3143 | Decision Theory | 3 | SSCM 3153 | Inferential Statistics | 3 |
| SSCM 3703 | Partial Differential Equations | 3 | SSCM 3353 | C++ Programming | 3 |
| SSCM 3793 | Calculus of Variations | 3 | SSCM 3753 | Fluid Mechanics | 3 |
| SSCM 3883 | Multi-Objective Decision Making | 3 | SSCM 3843 | Optimization Methods | 3 |
| SHAD 1043 | Organizational Behavior | 3 | SHAF 1013 | Principles of Marketing | 3 |
| Total Credit Hours | | 16 | Total Credit Hours | | 17 |

**** UHLB 1112 for any student who earns band 4 to 6 MUET, IELTS BAND 5.5, TOEFL Score 525 and TOEFL iBT Score 60 and above, will receive a credit exemption for that subject.***

| SHORT SEMESTER | | | | | |
|-------------------------------------|------------------------------|-----------|-------------------------------------|---------------------------|-----------|
| Code | Name of Course | cr | | | |
| SSCU 3915 | Industrial Training (HW) | 5 | | | |
| Total Credit Hours | | 5 | | | |
| SEMESTER 7 | | | SEMESTER 8 | | |
| Code | Name of Course | cr | Code | Name of Course | cr |
| SSCU 4902 | Undergraduate Project I | 2 | SSCU 4904 | Undergraduate Project II | 4 |
| Elective (Choose 12 credits) | | | Elective (Choose 12 credits) | | |
| SSCM 3503 | Complex Variables | 3 | SSCM 4213 | Generalized Linear Model | 3 |
| SSCM 3523 | Modern Algebra | 3 | SSCM 4243 | Sampling Techniques | 3 |
| SSCM 4113 | Time Series | 3 | SSCM 4813 | Optimal Control | 3 |
| SSCM 4163 | Stochastic Process | 3 | SSCM 4833 | Discrete Event Simulation | 3 |
| SSCM 4763 | Computational Fluid Dynamics | 3 | SSCM 4863 | Financial Mathematics | 3 |
| SSCM 4823 | Scheduling | 3 | | | |
| SHAD 1033 | Principles of Management | 3 | | | |
| Total Credit Hours | | 14 | Total Credit Hours | | 13 |