CHE Improvement response: Bachelor of Science Honours in Mathematics Education (98913)

* ***STE4802 History and Philosophy of Science is listed as a compulsory module, but is also listed as ‘Removed’. Presumably this is incorrect.***

| **Programme design details** | | | | | | |
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| **Modules for year 4** | | | | | | |
| Module | NQF level | Credits | Year level | Compulsory | Electives | Module status: Removed / Added / Modified / Unchanged |
| NUMBER THEORY II **(MAT4854)** | Level 7 | 12 | 4 | No | Yes | Removed |
| GRAPH THEORY I **(MAT4845)** | Level 8 | 12 | 4 | No | Yes | Removed |
| INTRODUCTION TO MECHANICS OF FLUIDS **(APM4812)** | Level 8 | 12 | 4 | No | Yes | Removed |
| ORDINARY DIFFERENTIAL EQUATIONS II **(MAT4844)** | Level 8 | 12 | 4 | No | Yes | Removed |
| MEASURE THEORY AND INTEGRATION I **(MAT4831)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| ORDINARY DIFFERENTIAL EQUATIONS I **(MAT4843)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| TOPOLOGY **(MAT4836)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| FUNCTIONAL ANALYSIS I **(MAT4841)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| MATRIX THEORY AND LINEAR ALGEBRA I **(MAT4857)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| MATRIX THEORY AND LINEAR ALGEBRA II **(MAT4858)** | Level 8 | 12 | 4 | No | Yes | Removed |
| NUMBER THEORY I **(MAT4853)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| PARTIAL DIFFERENTIAL EQUATIONS II **(MAT4848)** | Level 8 | 12 | 4 | No | Yes | Removed |
| PARTIAL DIFFERENTIAL EQUATIONS I **(MAT4847)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| COSMOLOGY **(APM4801)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| APPLIED FUNCTIONAL ANALYSIS **(APM4811)** | Level 8 | 12 | 4 | No | Yes | Removed |
| AN INTRODUCTION TO THE FINITE ELEMENT METHOD **(APM4810)** | Level 8 | 12 | 4 | No | Yes | Removed |
| INTRODUCTION TO GENERAL RELATIVITY **(APM4804)** | Level 8 | 12 | 4 | No | Yes | Removed |
| NUMERICAL SOLUTIONS TO PARTIAL DIFFERENTIAL EQUATIONS **(APM4808)** | Level 8 | 12 | 4 | No | Yes | Removed |
| MATHEMATICS OF OPTIMIZATION THEORY **(APM4805)** | Level 8 | 12 | 4 | No | Yes | Removed |
| RIEMANNIAN GEOMETRY AND TENSOR CALCULUS **(APM4806)** | Level 8 | 12 | 4 | No | Yes | Removed |
| GRAPH THEORY II **(MAT4846)** | Level 8 | 12 | 4 | No | Yes | Unchanged |
| CONTINUOUS TIME STOCHASTIC PROCESSES **(APM4802)** | Level 8 | 12 | 4 | No | Yes | Removed |
| OPTIMAL CONTROL **(APM4809)** | Level 8 | 12 | 4 | No | Yes | Removed |
| CONTEMPORARY THEORIES OF LEARNING AND IMPLICATIONS FOR TEACHING **(STE4801)** | Level 8 | 12 | 4 | Yes | No | Unchanged |
| CONTRIBUTIONS FROM COGNITIVE SCIENCE TO TEACHING AND LEARNING **(STE4804)** | Level 8 | 12 | 4 | Yes | No | Unchanged |
| HISTORY AND PHILOSOPHY OF SCIENCE **(STE4802)** | Level 8 | 12 | 4 | ~~Yes~~ | No | Removed |
| HONOURS REPORT IN MATHEMATICS EDUCATION **(HRMMA82)** | Level 8 | 24 | 4 | Yes | No | Unchanged |
| PROPOSAL FOR HONOURS IN MATHEMATICS, SCIENCE AND TECHNOLOGY EDUCATION **(HPSTE81)** | Level 8 | 12 | 4 | Yes | No | Unchanged |
| RESEARCH METHODS IN MATHEMATICS, SCIENCE AND TECHNOLOGY EDUCATION **(STE4803)** | Level 8 | 12 | 4 | Yes | No | Unchanged |
|  | | | | | | |
|  | | | | **Total Compulsory Credits:** 72 | **Total Elective Modules:** ~~23~~ 9  Elect 4 |  |

* ***Research should be in the form of a discrete research component that is appropriate to the disciple or field of study.***

HPSTE81 (PROPOSAL FOR HONOURS IN MATHEMATICS, SCIENCE AND TECHNOLOGY EDUCATION; 12 credits) is a prerequisite for HRMCO82 (HONOURS REPORT IN COMPUTING EDUCATION; 24 credits). Together these constitute a coherent 36 credits of conducting and reporting research under supervision. The proposal and project stages are separated for ease of student progression.