Honours in Physics-Mathematics (130 credits)		**Honours in Physics-Mathematics (111 credits) Program abolished**	
Requirements 2003-2005		**New course codes 2006**	
Compulsory first-year credits	~~33~~	Compulsory first-year credits	**30**
Suggested course stream for full-time students		Suggested course stream for full-time students	
Fall:		**Fall:**	
MAT1320 Calculus I	3	MAT1320 Calculus I	3
~~PHY1101~~ Fundamentals of Physics I	3	**PHY1121** Fundamentals of Physics I	**3**
~~PHY1201 Physics Laboratory~~	~~3~~		
~~Four~~ credits from:		**Three** credits from:	
~~ITI1220~~ Introduction to Computer Science I	~~4~~	**ITI1120** Introduction to Computer Science I	**3**
~~CSI1303~~ Introduction to Computing Concepts	~~4~~	**CSI1308** Introduction to Computing Concepts	**3**
~~GNG1101~~ Fundamentals of Engineering Computation	~~4~~	**GNG1106** Fundamentals of Engineering Computation	**3**
Winter:		**Winter:**	
MAT1322 Calculus II	3	MAT1322 Calculus II	3
~~PHY1102~~ Fundamentals of Physics II	3	**PHY1122** Fundamentals of Physics II	3
Fall or Winter:		**Fall or Winter:**	
MAT1341 Introduction to Linear Algebra	3	MAT1341 Introduction to Linear Algebra	3
~~Eleven~~ credits (minimum) from the following list or from other courses approved by the Department:	11	**Twelve** credits (minimum) from the following list or from other courses approved by the Department:	**12**
Fall:		**Fall:**	
BIO1109 Principles of Biology	3	BIO1109 Principles of Biology	3
~~BIO1120~~ Introduction to Organismal Biology	4	**BIO1130** Introduction to Organismal Biology	**3**
~~CHM1310~~ Principles pf Chemistry	4	**CHM1311** Principles of Chemistry	**3**
~~CHM2116 Laboratory of Environmental Chemistry~~	~~2~~		
~~CHM2352~~ Descriptive Inorganic Chemistry	3	**CHM2353** Descriptive Inorganic Chemistry	3
GEO1115 Introduction to Earth Materials	3	GEO1115 Introduction to Earth Materials	3
~~GNG1100~~ Engineering Mechanics	~~4~~	**GNG1105** Engineering Mechanics	**3**
~~GNG1102 Fundamentals of Computer Hardware~~	~~2~~		
Winter:		**Winter:**	
~~BIO1110~~ Introduction to Cell Biology	~~4~~	**BIO1140** Introduction to Cell Biology	**3**
~~CHG1120~~ Chemical Engineering Fundamentals	~~4~~	**CHG1125** Chemical Engineering Fundamentals	**3**
~~CHM1320~~ Organic Chemistry I	~~4~~	**CHM1321** Organic Chemistry I	**3**
CHM2311 Introduction to Structure and Bonding	3	CHM2311 Introduction to Structure and Bonding	3
~~ITI1221~~ Introduction to Computer Science II	~~4~~	**ITI1121** Introduction to Computer Science II	**3**
GEO1111 Introduction to Earth Systems	3	GEO1111 Introduction to Earth Systems	3
Compulsory second-year credits	~~39~~	Compulsory second-year credits	**27**
Fall:		**Fall:**	
~~MAT2122 Calculus III~~	~~3~~		
MAT2141 ~~Honours Linear Algebra I~~	3	MAT2141 **Linear Algebra I**	**3**
~~or~~			
~~MAT2341 Linear Algebra~~	~~3~~		

MAT2371 Introduction to probability	3
or	
MAT2377 Probability and Statistics for Engineers (winter)	3
MAT2324 Ordinary Differential Equationa and Laplace Transformation	3
or	
~~MAT2331~~ Ordinary Differential Equations and Numerical Methods	3
~~PHY2004~~ Practical Physics	~~6~~
~~PHY2310 Applied Optics~~	~~3~~
~~PHY2330~~ Mechanics	3
Winter :	
~~MAT2125 Mathematical analysis I~~	~~3~~
MAT2143 ~~Group Theory and Applications~~	3
PHY2323 Electricity and Magnetism	3
~~PHY2337 Mechanics II~~	~~3~~
PHY2361 Modern Physics	3
3 credits outside the Faculties of Science or Engineering	3
Compulsory third and fourth-year credits	~~31~~
Fall:	
PHY3341 Theoretical Physics	3
PHY3350 Thermodynamics	3
PHY3370 Introductory Quantum Mechanics	3
~~PHY3901~~ Physics and Applied Physics Laboratory I	~~4~~
~~PHY3903 Contemporary Issues in Physics~~	~~2~~
Winter:	
PHY3320 Electromagnetics Theory	3
PHY3355 Statistical Thermodynamics	3
~~PHY3905~~ Physics and Applied Physics Laboratory II	~~4~~
PHY4370 Quantum Mechanics	3
Three credits from:	3
PHY4362 Subatomic Physics I	3
PHY4382 Introduction to Solid State Physics	3
PHY4905 Physics Project	4
Six other credits in PHY from the above list or from the following list or from approved 5000-level courses:	6
PHY4310 Advanced Optics and Introduction to Photonics	3
PHY4327 Applications of Integrated Circuits in Physics	3
PHY4330 Advanced Dynamics	3
PHY4335 Physics of Continuous Media	3
~~PHY4340~~ Computational Physics I	~~4~~
~~PHY4341~~ Computational Physics II	~~4~~
PHY4346 General Relativity	3
PHY4361 Applied Nuclear Physics	3
PHY4368 Subatomic Physics II	3
PHY4385 Solid State Physics	3
PHY4387 Physics of Materials	3
PHY4390 Selected Topics in Physics	3
PHY4395 Astrophysics	3
Nine credits in mathematics at the 3000 or 4000-level	9
6 credits outside the Faculties of Science or Engineering	~~6~~

MAT2371 Introduction to probability	3
or	
MAT2377 Probability and Statistics for Engineers (winter)	3
MAT2324 Ordinary Differential Equationa and Laplace Transformation	3
or	
MAT2384 Ordinary Differential Equations and Numerical Methods	**3**
PHY2904 Practical Physics	**3**
PHY2311 Waves and Optics	**3**
PHY2333 Mechanics	**3**
Winter :	
MAT2143 **Algebraic Structures**	**3**
PHY2323 Electricity and Magnetism	3
PHY2361 Modern Physics	3
3 credits outside the Faculties of Science or Engineering	3
Compulsory third and fourth-year credits	**27**
Fall:	
PHY3341 Theoretical Physics	3
PHY3350 Thermodynamics	3
PHY3370 Introductory Quantum Mechanics	3
PHY3902 Physics and Applied Physics Laboratory I	**3**
Winter:	
PHY3320 Electromagnetics Theory	3
PHY3355 Statistical Thermodynamics	3
PHY3904 Physics and Applied Physics Laboratory II	**3**
PHY4370 Quantum Mechanics	3
Three credits from:	3
PHY4362 Subatomic Physics I	3
PHY4382 Introduction to Solid State Physics	3
PHY4906 Physics Project	**3**
Six other credits in PHY from the above list or from the following list or from approved 5000-level courses:	6
PHY4310 Advanced Optics and Introduction to Photonics	3
PHY4327 Applications of Integrated Circuits in Physics	3
PHY4330 Advanced Dynamics	3
PHY4335 Physics of Continuous Media	3
PHY4140 Computational Physics I	**3**
PHY4141 Computational Physics II	**3**
PHY4346 General Relativity	3
PHY4361 Applied Nuclear Physics	3
PHY4368 Subatomic Physics II	3
PHY4385 Solid State Physics	3
PHY4387 Physics of Materials	3
PHY4390 Selected Topics in Physics	3
PHY4395 Astrophysics	3
Nine credits in mathematics at the 3000 or 4000-level	9
6 credits outside the Faculties of Science or Engineering	6

* The following courses are recommended as being particularly useful: MAT3121, ~~MAT3125,~~ MAT3130, MAT3155, MAT3341, MAT3380, MAT4130, MAT4183, MAT4195, MAT4381, MAT4385, MAT4386, MAT4387, MAT4388, ~~PHY4905.~~ Other courses at the 4000 or 5000-level may be offered at the discretion of the Department of Physics.	* The following courses are recommended as being particularly useful: MAT3121, MAT3130, MAT3155, MAT3341, MAT3380, MAT4130, MAT4183, MAT4195, MAT4381, MAT4385, MAT4386, MAT4387, MAT4388. Other courses at the 4000 or 5000-level may be offered at the discretion of the Department of Physics.