



THE MASTER'S UNIVERSITY

DEGREE CHECKLIST

NAME: _____

EMPHASIS: _____

SCHOOL of SCIENCE, MATHEMATICS, TECHNOLOGY & HEALTH

Department of Mathematics B.A. in Mathematics

Students are required to complete 24 Mathematics core units, 24-26 Mathematics emphasis units (see back of form), 37 general education units, and 21 biblical studies units. A minimum total of 122 units are required to graduate.

MATHEMATICS CORE COURSES

Units	Term	
3		CIS111 Introduction to Computer Programming
3		MA121 Calculus I
3		MA122 Calculus II
3		MA221 Calculus III
3		MA231 Linear Algebra
3		MA282 Ordinary Differential Equations
3		MA302 Introduction to Mathematical Proof
1		MA400 Mathematics Seminar
1		MA400 Mathematics Seminar
1		MA412 Integrated Review
24		<i>Total units required for core</i>

BIBLICAL STUDIES

Units	Term	
3		B121 Essentials of Christian Thought
3		B101 Old Testament Survey I
3		B102 Old Testament Survey II
3		B201 New Testament Survey I
3		B202 New Testament Survey II
3		BTH321 Christian Theology I
3		BTH322 Christian Theology II
21		<i>Total units required</i>

GENERAL EDUCATION

Units	Term	
3		C100 Spoken Communication
3		E110 English Composition
3		ECN200 Essentials of Economics & Society
3		H211 Essentials of World History I
3		H212 Essentials of World History II
3		H230 Essentials of U.S. History
3		LS150 Essentials of Biology <i>or</i>
		GS150 Essentials of Geology
1		LS150L Essentials of Biology Lab <i>or</i>
		GS150L Essentials of Geology Lab
3		MU190 Essentials of Music & Art
3		P311 Essentials of Philosophy
3		POL220 U.S. Government
3		Literature Survey (choose one - see below*)
3		Literature Elective (choose one - see below * or **)
37		<i>Total units required for emphasis</i>

* E211 / E212 English Literature I or II
E221 / E222 World Literature I or II
E231 / E232 American Literature I or II

** E120 Introduction to Literature
E313 Age of Romanticism
E314 Victorian Age
E334 The Short Story
E335 The English Novel
E374 Studies in Jane Austen
E404 Studies in John Calvin
E405 Shakespeare
E406 Milton
E415 Contemporary Literature
E416 Modern British Writers
E425 20th Century American Literature
E453 Psychoanalytic Criticism

EMPHASIS COURSES

PURE MATHEMATICS

Units	Term	
2		MA222 Calculus IV
3		MA344 Modern Geometry
3		MA355 Number Theory/History of Mathematics
3		MA383 Complex Analysis
3		MA453 Abstract Algebra I
3		MA482 Topics in Mathematics

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSES

3	
3	
3	

26 *Total units required for emphasis*

APPLIED MATHEMATICS

Units	Term	
2		MA222 Calculus IV
3		MA253 Discrete Mathematics
3		MA365 Probability
3		MA366 Mathematical Statistics
3		MA383 Complex Analysis
3		MA425 Mathematical Modeling
3		MA463 Numerical Analysis
3		MA482 Topics in Mathematics

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSES

3	
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26 *Total units required for emphasis*

MATHEMATICS EDUCATION EMPHASIS COURSES

Units	Term	
3		P321* History and Philosophies of Education
3		MA253 Discrete Mathematics
3		MA262 Elementary Statistics
3		MA344 Modern Geometry
3		MA355 Number Theory/History of Mathematics
3		MA425 Mathematical Modeling
3		MA453 Abstract Algebra I

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSES

3	
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24 *Total units required for emphasis*

*Can be taken instead of P311 to satisfy the General Education philosophy requirement; teaching credential program prerequisite.

PRE-ENGINEERING EMPHASIS

Units	Term	
4		PS251 General Physics I
4		PS252 General Physics II
1		MA111 Introduction to Engineering
2		MA222 Calculus IV
3		MA425 Mathematical Modeling
3		MA463 Numerical Analysis

THREE OF THE FOLLOWING:

3		MA365 Probability
3		MA366 Mathematical Statistics
3		MA383 Complex Analysis
3		MA482 Topics in Mathematics

26 *Total units required for emphasis*

MINOR IN MATHEMATICS

Units	Term	
3		CIS111 Introduction to Computer Programming
3		MA121 Calculus I
3		MA122 Calculus II
3		MA221 Calculus III
3		MA231 Linear Algebra
3		MA282 Ordinary Differential Equations

ONE OF THE FOLLOWING

1		MA400 Mathematics Seminar
1		MA412 Integrated Review

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSE

3	
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22 *Total units required for minor*