

**Course Options for Mathematical Sciences Majors Participating in
Messiah-Approved Off-Campus Study
Messiah College EpiCenter**

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The following is a listing of courses that we have identified as possible options for students in your department. **This list is fluid and constantly changing.** Please use this as a guide to help identify programs that might work with your curriculum. However, please refer to current course listings for actual courses that will be offered the semester that you are studying off campus.

Code Course

City University – Athens

BC 303 Interpreting Statistics and Data
CS 220 Introduction to Programming
CS 241 Principles of Information Processing
CS 304 Data Communications
CS 392 Network Systems and Internet Working
CS 440 JAVA I
CS 450 Systems Analysis and Object Oriented Design
CS 453 Intro to Server-side Languages
CS 465 Intermediate C++
CS 470 Operating Systems
CS 471 Database Management Systems – Architecture and Administration
MTH 155 College Algebra
MTH 180 Pre-Calculus
MTH 220 Calculus

London Internship Program

IN1001 Business & Organisations
IN1002 Computation and Reasoning
IN1003 Database Systems
IN1004 Mathematics for Computing
IN1005 Software Engineering
IN1006 Systems Architecture
IN1007 Programming in JAVA
IN2001 Artificial Intelligence
IN2002 Data Structures and Algorithms
IN2003 Decision Support Systems
IN2004 Distributed Systems
IN2005 Formal Methods
IN2006 Functional Programming
IN2007 Human Computer Interaction
IN2008 Information Management
IN2009 Language Processors
IN2010 Management and Information Technology
IN2011 Networks and Operating Systems
IN2012 Neural and Evolutionary Computing
IN2013 Object-Oriented Analysis and Design
IN2014 Parallel and Concurrent Programming
IN2016 Software Measurement

IN2017 Systems Theory
IN2023 Audio Processes for Music and Multimedia
IN2024 Discrete Music Structures
IN2025 Games Design Theory and Practice
IN2029 Programming in C++
IN3001 Advanced Databases
IN3002 Advanced Human Computer Interaction
IN3003 Business Engineering with ERP Solutions
IN3004 Business Object Technology
IN3008 Electronic Commerce
IN3010 Health Informatics
IN3011 Introduction to Data Mining
IN3012 IT Security
IN3014 Management of IT Strategy
IN3015 Requirements of Engineering
IN3016 Software Agents
IN3017 Theory of Computation
IN3018 Bioinformatics
IN3021 Advanced Music Informatics
IN3024 Entrepreneurship in IT
IN3026 Advanced Game Design and Theory
MA1601 Mathematics
MA1603 Programming
MA1604 Computational Mathematics
MA1606 Algebra
MA1606 Calculus
MA1607 Geometry and Vectors
MA1609 Mathematical Communications
MA2601a Calculus
MA2601b Linear Algebra
MA2603 Mathematical Methods
MA2605 Dynamical Systems
MA2607 Applied Mathematics
MA2608 Numerical Mathematics
MA3601 Differential Equations
MA3607 Differential Equations for Finance

University of Gloucestershire - Cheltenham, ENGLAND (BCA)

BT110 Information Technology & Data Presentation
BT111 Using Information Technology
BT120 Fundamentals of Business Information Technology
BT190 Study and Transferable Skills
BT208 Planning IT in Organisations
BT214 Customising Applications
BT220 Managing Information Technology in Organisations
BT250 Research Methods and HCI
BT260 Professional Issues
BT302 Human Computer Interaction
BT303 Business Information Technology Project
BT306 IT in Society
BT309 IT Strategy

BT310 Business Intelligence
BT320 Strategic Business & IT Management
BT399 Single Dissertation
CO120 Programming & Software Development
CO130 Computing Fundamentals & Programming
CO190 Study & Transferable Skills
CO229 Industrial Placement
CO230 Object Oriented Design & Programming
CO240 Software Specification & Design
CO250 Research Methods & Human-Computer Interaction
CO260 Professional Issues
CO303 Research Project
CO304 Software Quality Assurance
CO311 Language Comparison
CO350 Advanced Group Project
CO390 Post Placement Project
CO399 Single Dissertation
IGD110 Interactive Games Fundamentals
ISD110 The Internet and World Wide Web
ISD210 Markup Languages & Scripting
ISD320 Internet Systems Integrity
IT120 Systems Analysis & Database Design
IT190 Study & Transferable Skills
IT211 IT User Support
IT220 Database Application Development
IT230 Systems Modelling & Design
IT250 Research Methods & Human-Computer Interaction
IT260 Professional Issues
IT307 Computer Assisted Learning
IT312 Systems Administration
IT315 Database Administration
IT320 Advanced Databases
IT399 Single Dissertation
MU110 Introduction to Multimedia
MU120 Digital Media Design & Development
MU220 User Interaction Studies
MU301 Multimedia in Business and Industry
MU308 Multimedia Marketing
NEC110 Networking Fundamentals
NEC210 Network Implementation & Protocols
NEC220 Data Communications & Network Programming
NEC305 Network Design

University of San Francisco in Quito - Quito, ECUADOR (BCA)

CMP090 Herramientas de Oficina
CMP210 Programación I
CMP211 Programación II
CMP213 Programación para Ciencias e Ingeniería I
CMP215 Aplicaciones de Oficina
CMP220 Estructura de Datos y Algoritmos
CMP250 Modelos de Decisión

CMP311 Programación III
CMP320 Programación para Ciencia e Ingeniería II
CMP331 Diseño de Sistemas
CMP335 Organización de Computadores
CMP345 Teoría Computacional
CMP417 Base de Datos
CMP420 Arquitectura de Computadores
CMP423 Sistemas Operativos
CMP425 Inteligencia Artificial
CMP431 Redes
CMP501S Seminario de Tesis I
CMP502S Seminario de Tesis II
CMP510 Redes y Comunicaciones
CMP517 Base de Datos II
CMP520 Comercio Electrónico
CMP550 Administración de Centros de Cómputo
CMP560 Auditoría Informática
CMP565 Seguridad Informática
CMP590 Proyectos Informáticos
MAT011c Matemáticas Previas al Cálculo para Administración
MAT100 Matemáticas Básicas
MAT115 Matemáticas Aplicadas a la Administración
MAT116 Cálculo Aplicado
MAT117/J Cálculo Diferencial e Integral
MAT125/J Cálculo y Geometría Avanzado I
MAT126/J Cálculo y Geometría Avanzado II
MAT130 Estadística y Sociedad
MAT131/J/X/XJ Cálculo I
MAT132/J Cálculo II
MAT200 Estadística
MAT221/L Álgebra Lineal
MAT231/J Cálculo III
MAT240 Bioestadística
MAT241 Ecuaciones Diferenciales
MAT261/J Introducción a las Probabilidades y sus Aplicaciones
MAT262/L Estadística para Ingeniería
MAT270 Matemáticas Discretas
MAT280 Teoría de Números
MAT285 Fundamentos de Geometría
MAT290 Historia de la Matemática
MAT330 Análisis Numérico
MAT350 Modelos Cuantitativos
MAT360 Simulación
MAT362 Diseño y Análisis de Experimentos
MAT363 Procesos Estocásticos
MAT370 Lógica y Teoría de Conjuntos
MAT372 Topología
MAT372T Álgebra Abstracta
MAT374 Topología II
MAT374T Álgebra Abstracta II
MAT380 Variable Compleja

MAT390 Cálculo Avanzado
MAT401 Tópicos en Matemáticas
MAT410 Investigaciones de Operaciones I
MAT490 Geometría Diferencial
MAT520 Investigación de Operaciones II
MAT533 Análisis Numérico Avanzado
MATS01 Seminario en Regresión e Inferencia