The College of Arts and Sciences is, from both historical and functional points of view, the core of the modern university. The College of Arts and Sciences views creativity, inquiry and understanding as among the greatest values in human experience. Thus, the College of Arts and Sciences is dedicated to the questioning, creation and transmission of knowledge; to the provision of undergraduate and graduate educational programs that are responsive to the need of an enlightened and productive citizenry; and to the provision of programs and services that enhance the quality of life of the

people it serves.

These goals complete a commitment to creativity and inquiry free of bias and based upon the principles of objective scholarship. The College's goals require a responsibility to promote and convey those elements of the liberal arts and sciences that must be essential components of the educational goals of all units of the university. The college seeks richness that Sciences vBh drsitythat 62Tw T*9 rw2thonces 01scie

MASTER OF SCIENCE IN BIOMEDICAL SCIENCES (M.S. BMS)

Students should consult the General Regulations section of the Graduate Catalog for additional information regarding Graduate School admission requirements, transfer credit, and other critical policies and procedures.

Mission

The M.S. program and certil-cate in the Biomedical Sciences are designed to achieve the following: 1) to prepare students for future entry into medical and other professional schools in the health sciences and 2) to provide students with advanced knowledge in the biomedical sciences.

Upon completion of the degree program, students will gain a thorough knowledge of biomedical concepts developed through courses that focus on the changing face of medicine and biotechnolog{. This program will foster strategic and critical thinking, logical anal{sis, and propose solutions to the challenges of medicine, the allied health sciences, and biotechnolog{.

The expected program learning outcomes of students enrolled in the Master of Science in the Biomedical Sciences include:

- Demonstrate a conceptual competence of the basic biomedical sciences.
- Develop a framework for maintaining technological currenc { in the biomedical sciences and healthcare.
- Develop critical thinking skills for appl{ing scientiŁc knowledge in problem-solving.
- Acquire skills for developing h{potheses, anal{|ing data, and interpreting and communicating results in the biomedical sciences.
- Develop written and oral skills for communicating e ectivel and professionally.
- 6. Promote ethical standards for all professional activities in the biomedical sciences and healthcare.

Prerequisite Requirements

Candidates for admission must have a baccalaureate degree from a regionall { accredited college or universit { . At a minimum, applicants should have successfull { completed Genetics (BIO 3320/ BIO L320, Human Anatom { and Ph { siolog { I, II (BIO 3347 / BIO L347, BIO 3348 / BIO L348), and Microbiolog { (BIO 3372 / BIO L372). Other prerequisites include General Ph { sics I, II (PHY 2252 / PHY L252, PHY 2253 / PHY L253), General Chemistr { I, II (CHM 1142 / CHM L142, CHM 1143 / CHM L143), and Organic Chemistr { I, II (CHM 3342 / CHM L342, CHM 3343 / CHM

- taken in its place
- 5. For Non-Thesis Option, successful completion of all components of the comprehensive examination

Curriculum (30-31 sh)

The Master of Sciences in Biomedical Sciences is a 30-31 hour

Core Courses (9 sh)

CS 5549	3	Analysis of Algorithms
CS 5545	3	Computer Architecture
CS 5550	3	Operating System Principles

Select one option below:

Non-Thesis Option: (24 sh)

Required Courses: (9 sh)

CS 6630 3 Introduction to Bioinformatics

CS 6682 3 Machine Learning

CS 6625 3 Specialized Study in Computer Science

Elective Courses (15 sh)

Select 15 hours of advisor- approved Computer Science graduate courses.

Thesis Option: (24 sh)

Required Courses: (12 sh)

CS 6630 3 Introduction to Bioinformatics

CS 6682 3 Machine Learning

CS 6699 3-6 Research and Thesis (6 sh)

Elective Courses (12 sh)

Select 12 hours of advisor- approved Computer Science graduate courses.

Computer Network and Security Concentration

Core Courses (9 sh)

CS 5549	3	Analysis of Algorithms
CS 5545	3	Computer Architecture
CS 5550	3	Operating System Principles

Select one option below:

Non-Thesis Option: (24 sh)

Required Courses: (9 sh)

CS 6676	3	Advanced Computer Network
CS 6674	3	Network and Information Security
CS 6625	3	Specialized Study in Computer Science

Elective Courses (15 sh)

Select 15 hours of advisor- approved Computer Science graduate courses.

Thesis Option: (24 sh)

Required Courses: (12 sh)

CS 6676	3	Advanced Computer Network
CS 6674	3	Network and Information Security
99 ((00		

CS 6699 3-6 Research and Thesis

Elective Courses (12 sh)

Select 12 hours of advisor- approved Computer Science Degree Rquirements

Elective Courses (15 sh)

Select 15 hours of advisor- approved Computer Science graduate courses.

Thesis Option: (24 sh)

Required Courses: (12 sh)

CS 6680 3 Advanced Software Engineering
CS 6640 3 Advanced Database Concepts
CS 6699 3-6 Research and Thesis (6)

Elective Courses (12 sh)

Select 12 hours of advisor- approved Computer Science graduate courses.

Comprehensive Exam

A candidate that chooses the non-thesis option must pass the comprehensive exam before the degree can be awarded. The comprehensive exam should be taken during the studentsø last semester of course work. The exam format is a written exam covering the basic core courses onl {. Students must pass all of the 3 sections of the exam.

Thesis/Project Proposal

Students who choose the thesis option must prepare a thesis proposal no later than the second graduate academic semester and must be approved b{ the thesis proposal committee.

Elective Courses: (12/15 sh)

CS 6635 3 Image Processing

CS 6640 3

Conditional Admission

Conditional Admission does not appl{ to this program.

Accelerated BS/MSCJ Admission

Certain qualiŁed honors students who successfull { complete the Tro{ BS/MS in Criminal Justice Accelerated Honors Option will be allowed to transfer up to 9 hours of Master of Science in Criminal

MASTER OF SCIENCE IN ENVIRONMENTAL AND BIOLOGICAL SCIENCES

Students should consult the General Regulations section of the Graduate Catalog for additional information regarding Graduate School admission requirements, transfer credit, and other critical policies and procedures.

Purpose and Goals

Environmental The Master of Science Graduate Program and Biological Sciences is designed to bro he studentøs perspective and provide skills and k nowledge nderstanding and solving problems in the environmental and cal sciences. The Program teaches students the direct and ct economic, mental and of the social, and political contributions biological sciences. The Program underscores t erdisciplinar{ and cooperative nature of environmental and ological issues. The Program teaches how to manage conflicts emphasi es the importance of e ectivel (communicating with the ate and public sectors, regulator{ agencies, interest groups, and munities. The Program objectives are listed below:

- To demonstrate the pivotal role of the environmental and biological sciences in understanding and addressing environmental, ecological, medical, agricultural, and polic{related issues;
- 2. To promote the professional development of students for entr{ and advancement in the private and public sectors as scientists, educators, administrators, or managers;
- To provide students with the necessar{ skills for performing research, reviewing and evaluating regulator{ guidelines, and writing professional documents;
- To foster an understanding and appreciation of the role of values and ethics in research, management, and institutional performance;
- To? strengthen the sadautemic foundations of students seeking entr{ into professional schools

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MASTER OF SCIENCE IN INTERNATIONAL RELATIONS

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better grade, can be applied toward the degree; graduate-level courses completed b{ U.S. service personnel in Professional Militar{ Education programs ma{ also qualif{ for transfer credit. These courses must be comparable in catalog description to Tro{ Universit{ courses in the MSIR program and must be recommended for transfer credit b{ the Chair of the Department of Political Science and approved b{ the Dean of the Graduate School.}

Degree Requirements

- 1. Unconditional admission
- 2. Overall 3.0 GPA
- 3. Completion of the curriculum listed below. If the student makes a õDö or õFö in a core course, the course must be retaken. If the student makes a õDö or õFö in an elective course, the course ma{ either be retaken or another elective taken in its place.
- Sussessful completion (õBö or better) of IR 6690 Capstone or Thesis
- 5. Successful completion (õBö or better) **RESIS** 1 Research Methods in International Relations, the program **Essento** V requirement

IR	6665	3	Readings in International Relations
IR	6668	3	Thesis
IR	6669	3	Thesis
IR	6681	3	Tribalism and Colonialism in Africa
IR	6684	3	Violence in Latin America
IR	6685	3	Terrorism and Political Violence
IR	6686	3	Latin American Security
IR	6687	3	Latin American Political Economy
IR	6688	3	Political Islam
PA	6610	3	Foundations of Public Administration
PA	6622	3	Public Policy

NATIONAL SECURITY AFFAIRS CONCENTRATION (21 sh or 18 sh with Thesis)

Students	must ch	oose any	y three of the following courses: (9 sh)
HIS	5 5504	3	Military History of the United States
IR	5524	3	Contemporary American Foreign Policy
IR	5540	3	Confict Processes
IR	5541	3	Middle Eastern Security
IR	5552	3 /	International Law
IR	6600 R	3 Æ R	Mele®ed To#ics in International ocesses
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2.	Thesis * ô Students choosing the thesis option must register for IR 6668 (3 credit hours) and IR 6669 (3 credit hours) as their last two courses in the program. The { must successfull { research}, write, and defend their thesis

and	programs	will	not	be	accepted	as	transfer	credits	for	Public

Specialized Elective Courses

PA 6625 Speciali|ed Stud{ in Public Administration or PA 6660 Readings in Public Administration ma{ be utili|ed with the prior approval of the Director of the MPA\$Program. In combination, these courses ma{ not be used for more than six total credit

1.	Completed Application for Admission
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TROY UNIVERSITY M.S. - BIOMEDICAL SCIENCES (BMS)

30-31 Semester-Hour Program

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DEGREE REQUIREMENTS:

CORE COURSES ...

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THESIS OPTION |

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ELECTIVE COURSES:

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Note: To remain eligible for Federal Financial Aid, all undergraduate courses MUST be completed before students enroll in any graduate courses. Students on Federal Financial Aid may NOT enroll in undergraduate courses after they have begun graduate coursework.

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ADMISSION STATUS:

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TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE Artificial Intelligence Concentration

33 Semester-Hour Program

DEGREE REQUIREMENTS:

TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE

Bioinformatics Concentration

-	33 Semester-Hour Progran	 n	
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TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE

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Distributed Systems Concentration

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	33 Sem	ester-Hour P	rogram				
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TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE Software Development Concentration

	33 Semo	ester-Hour Program		
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TROY UNIVERSITY MASTER OF SCIENCE IN CRIMINAL JUSTICE

30 / 36 Semester-Hour Program

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DEGREE REQUIREMENTS:

REQUIRED CORE COURSES

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TROY UNIVERSITY M.S. - ENVIRONMENTAL AND BIOLOGICAL SCIENCES (EBS)

	30/36 Semester-Hour Program						
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DEGREE REQUIREMENTS:

TROY UNIVERSITY MASTER of SCIENCE IN INTERNATIONAL RELATIONS

36 Semester-Hour Program

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TROY UNIVERSITY MASTER OF PUBLIC ADMINISTRATION

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TROY UNIVERSITY MASTER OF SCIENCE IN SOCIAL SCIENCE

	36 Semester-Hour Program						
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TROY UNIVERSITY GRADUATE CERTIFICATE IN BIOMEDICAL SCIENCES

18-19 Semester-Hours

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DEGREE REQUIREMENTS:

REQUIRED COURSES:

ITEMS TO BE DISCUSSED:

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TROY UNIVERSITY

GRADUATE CERTIFICATE IN PUBLIC HEALTH ADMINISTRATION

18 Semester-Hours

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