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 thsd Sciences vBh drsitythat 62Tw T*ϑ 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 certiýcate 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 biotechnology. This program will foster strategic and critical thinking, logical analysis, and propose solutions to the challenges of medicine, the allied health sciences, and biotechnology.

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

1. Demonstrate a conceptual competence of the basic biomedical sciences.
2. Develop a framework for maintaining technological currency in the biomedical sciences and healthcare.
3. Develop critical thinking skills for applying scientiýc knowledge in problem-solving.
4. Acquire skills for developing hypotheses, analyzing data, and interpreting and communicating results in the biomedical sciences.
5. Develop written and oral skills for communicating eýectively 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 regionally accredited college or university. At a minimum, applicants should have successfully completed Genetics (BIO 3320/ BIO L320, Human Anatomy and Physiology I, II (BIO 3347 / BIO L347, BIO 3348 / BIO L348), and Microbiology (BIO 3372 / BIO L372). Other prerequisites include General Physics I, II (PHY 2252 / PHY L252, PHY 2253 / PHY L253), General Chemistry I, II (CHM 1142 / CHM L142, CHM 1143 / CHM L143), and Organic Chemistry 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*
CS 6699	*3-6*	*Research and Thesis*

Elective Courses (12 sh)

Select 12 hours of advisor- approved 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 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 studentsô last semester of course work. The exam format is a written exam covering the basic core courses only. 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 by the thesis proposal committee.

Elective Courses: (12/15 sh)

CS	*6635*	*3*	*Image Processing*
CS	*6640*	*3*	

Conditional Admission

Conditional Admission does not apply to this program.

Accelerated BS/MSCJ Admission

Certain qualiýed honors students who successfully complete the Troy 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

The Master of Science Graduate Program in Environmental and Biological Sciences is designed to broaden the studentôs perspective and provide skills and knowledge for understanding and solving problems in the environmental and biological sciences. The Program teaches students the direct and indirect economic, social, and political contributions of the environmental and biological sciences. The Program underscores the interdisciplinary and cooperative nature of environmental and biological issues. The Program teaches how to manage conþicts and emphasizes the importance of e¤ectively communicating with the private and public sectors, regulatory agencies, interest groups, and communities. The Program objectives are listed below:

1. To demonstrate the pivotal role of the environmental and biological sciences in understanding and addressing environmental, ecological, medical, agricultural, and policy-related issues;
2. To promote the professional development of students for entry and advancement in the private and public sectors as scientists, educators, administrators, or managers;
3. To provide students with the necessary skills for performing research, reviewing and evaluating regulatory guidelines, and writing professional documents;
4. To foster an understanding and appreciation of the role of values and ethics in research, management, and institutional performance;
5. To strengthen the academic foundations of students seeking entry into professional schools

graduate program and also be approved by the Department Chair. Non-thesis students who transfer a ñcoreò course are still required to take a written comprehensive exam based on the material presented at Troy University.

Degree Requirements

1. Unconditional

MASTER OF SCIENCE IN INTERNATIONAL RELATIONS

Students should consult the General Regulations section of the

better grade, can be applied toward the degree; graduate-level courses completed by U.S. service personnel in Professional Military Education programs may also qualify for transfer credit. These courses must be comparable in catalog description to Troy University courses in the MSIR program and must be recommended for transfer credit by the Chair of the Department of Political Science and approved by 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 ñDò or ñFò in a core course, the course must be retaken. If the student makes a ñDò or ñFò in an elective course, the course may either be retaken or another elective taken in its place.
4. [illegible] essful completion (ñBò or better) of IR 6690 Capstone or Thesis
5. Successful completion (ñBò or better) [illegible] 1 Research Methods in International Relations, the p[illegible] program [illegible] 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 choose any three of the following courses: (9 sh)

HIS	*5504*	*3*	*Military History of the United States*
IR	*5524*	*3*	*Contemporary American Foreign Policy*
IR	*5540*	*3*	*Conflict Processes*
IR	*5541*	*3*	*Middle Eastern Security*
IR	*5552*	*3*	*International Law*
IR	*6600*	*3*	*Selected Topics in International Processes*

2. Thesis * ð 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. They must successfully research, write, and defend their thesis

and programs will not be accepted as transfer credits for Public

Specialized Elective Courses

PA 6625 Specialized Study in Public Administration or PA 6660 Readings in Public Administration may be utilized with the prior approval of the Director of the MPA Program. In combination, these courses may not be used for more than six total credit

1. Completed Application for Admission

4. Maintain

TROY UNIVERSITY

M.S. - BIOMEDICAL SCIENCES (BMS)

30-31 Semester-Hour Program

DEGREE REQUIREMENTS:

CORE COURSES

THESIS OPTION

ELECTIVE COURSES:

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.

ITEMS TO BE DISCUSSED:

ADMISSION STATUS:

TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE

Artificial Intelligence Concentration

33 Semester-Hour Program

DEGREE REQUIREMENTS:

TROY UNIVERSITY

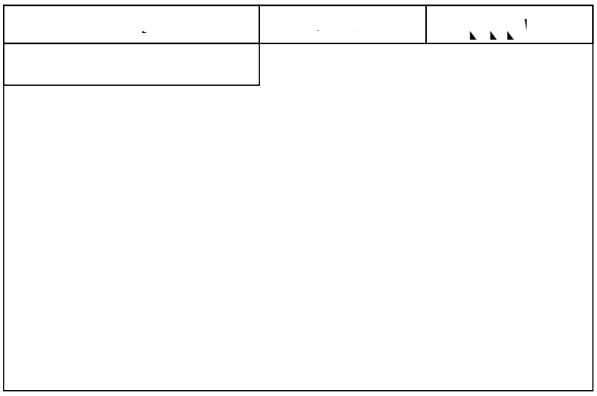
MASTER OF SCIENCE IN COMPUTER SCIENCE

Bioinformatics Concentration

33 Semester-Hour Program

DEGREE REQUIREMENTS:

REQUIRED CORE COURSES



ITEMS TO BE DISCUSSED:

- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

Progress:

THIS FORM REQUIRED FOR EVERY REGISTRATION, EVERY TERM

Progress:

TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE

Distributed Systems Concentration

33 Semester-Hour Program

		#			

DEGREE REQUIREMENTS:

PREREQUISITE COURSES

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.

REQUIRED CORE COURSES

Non-Thesis Option Required Courses:

Thesis Option Required Courses:

ADVISOR APPROVED ELECTIVES:

ITEMS TO BE DISCUSSED:

- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

Progress:

THIS FORM REQUIRED FOR EVERY REGISTRATION, EVERY TERM

Revised: 1/20206R 0f2

TROY UNIVERSITY

MASTER OF SCIENCE IN COMPUTER SCIENCE

Software Development Concentration

33 Semester-Hour Program

		#			

DEGREE REQUIREMENTS:

Progress:

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

TROY UNIVERSITY
MASTER OF SCIENCE IN CRIMINAL JUSTICE

30 / 36 Semester-Hour Program

DEGREE REQUIREMENTS:

REQUIRED CORE COURSES

THESIS OPTION*:

TROY UNIVERSITY

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

30/36 Semester-Hour Program

DEGREE REQUIREMENTS:

TROY UNIVERSITY

MASTER of SCIENCE IN INTERNATIONAL RELATIONS

36 Semester-Hour Program

TROY UNIVERSITY

MASTER OF PUBLIC ADMINISTRATION

36 / 39 Semester-Hour Program

DEGREE REQUIREMENTS:

REQUIRED CORE COURSES

TROY UNIVERSITY

MASTER OF SCIENCE IN SOCIAL SCIENCE

36 Semester-Hour Program

TROY UNIVERSITY

GRADUATE CERTIFICATE IN BIOMEDICAL SCIENCES

18-19 Semester-Hours

DEGREE REQUIREMENTS:

REQUIRED COURSES:

ITEMS TO BE DISCUSSED:

- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

TROY UNIVERSITY

GRADUATE CERTIFICATE IN PUBLIC HEALTH ADMINISTRATION

18 Semester-Hours

DEGREE REQUIREMENTS:

REQUIRED CERTIFICATE COURSES: