

## EMAC: Just the Facts

EMAC is an undergraduate degree offered by the Department of Communication and Media and the Department of the Arts.

EMAC offers students the opportunity to study electronic arts in relation to the communication field, and prepares them for careers in the applied arts and communication. Students take courses from the two departments, combining the strengths of Communication and Media's degrees in Communication, Technical Communication, Human-Computer Interaction (HCI), and Communication and Rhetoric (B.S., several M.S., and Ph.D.) with Arts' world-famous iEAR Studios (integrated Electronic Arts at Rensselaer) and M.F.A. degree.

Merit scholarships and Need-Based Financial Aid are available to qualified applicants. Our Financial Aid Office can provide you with more information about how students can qualify.

The goal of an EMAC education is to give students the best of both worlds: skills in hands-on arts design and communication combined with a broad cultural perspective.

### Nature of the Program

EMAC is a B.S. program in Electronic Media, Arts, and Communication jointly offered by the Department of Communication and Media; and the Department of the Arts at Rensselaer. It provides students with the vital multidisciplinary education necessary for leadership in a rapidly transforming information society. EMAC integrates aesthetic, creative, and critical thought with expertise in advanced electronic multimedia. Building on the strong technological infrastructure of Rensselaer, this program offers students hands-on education in new art and communication technologies and theoretical frameworks in order to understand and shape the cultural impact of these technologies. A major strength is the balance between individual and collaborative activity facilitated by the interactive multimedia education pioneered by Rensselaer.

The program represents a natural evolution for the two departments, combining the expertise and facilities of an established B.S. in Communication, a leading M.S. in Technical Communication, a new M.S. in Human-Computer-Interaction (HCI), certificates in Graphics and in HCI, and a prestigious M.F.A. in Electronic Arts. This interdisciplinary approach produces entrepreneurs and critical thinkers who will use technology in innovative ways in both commercial and artistic spheres, and in the increasingly significant overlap between these realms.

### Career options may include, but not be limited to:

- Information Design
- Graphic Design
- Web Design and Authoring
- Print and Online Publishing
- Human-Computer Interaction (HCI)
- Virtual Reality Design
- Video, Digital, or Installation Art
- Computer Animation and 3-D Graphics
- Digital Audio
- Game Design
- Media Production
- Marketing Communication
- Entrepreneurship



# EMAC requirements

The EMAC major requires 60 credits in EMAC courses. This includes the EMAC Core (24 credits total, including 16 credits in specific required courses, 8 credits of Thesis Sequence, 4 credits in Writing, and 4 credits in Art History/Theory), and 28 elective credits at the Intermediate and Advanced levels. **[All courses are 4 credits each unless otherwise noted.]**

**EMAC Core (24 credits):** taken by all EMAC students in all concentrations

## Required Courses (16 credits)

All students take the following required courses:

Intro to Communication Theory (COMM-1510) 4 credits

Intro. to Visual Communication (COMM-2610) 4 credits

**2 of the 3 courses listed below, per specific concentration.** All students are strongly encouraged to take the additional course in their humanities core or free electives:

Media Studio: Imaging (ARTS-1020) 4 credits

Digital Filmmaking (ARTS-1XXX) 4 credits

Music and Sound (ARTS-1XXX) 4 credits

## Art History/Theory (4 credits)

See attached concentration descriptions for specific course suggestions by concentration.

## Writing (4 credits)

Students select one:

Rhetoric and Writing (WRIT-2110)

Writing for Promotion and Marketing (WRIT-4xxx)

Proposing and Persuading (WRIT-4550)

Writing for Classroom and Career (WRIT-1110)

## Intermediate Courses (16 credits)

Each concentration should include four intermediate courses that are related to the advanced courses in the concentration (and fulfill prerequisites for the advanced courses.) Students will select four intermediate prerequisite courses (16 credits) from a list of courses specific to each concentration. **Students must take at least one course from Arts and at least one course from Communication and Media.**

See attached lists for suggested **concentration options** in specific areas such as **Graphic Design, Digital Storytelling, Marketing Communication Design, Interaction Design, or Sound Design and Popular Culture.**

## Advanced Courses (12 credits)

Each concentration should consist of three advanced courses (12 credits) at the 4000-level. At least one course from the list must be from the other department (Arts or Communication and Media).

## Required Thesis Sequence (8 credits)

Each concentration will include two thesis courses or one thesis course plus an internship. Students in their final two semesters of study (senior year) must select their thesis courses from designated courses (\*) on the list of advanced courses (4000-level) for each optional concentration.

Before the first semester of their thesis experience, each student will choose—in consultation with the EMAC advisor or an appropriate faculty member—either, a course or an internship that is clearly related to advanced work the student has done as part of his or her chosen EMAC concentration. **Courses may not be used to fulfill both the Thesis Experience and the Advanced Course Requirements.**

\*\* Students may define their own concentrations based on the above requirements, and subject to the approval of their academic advisor.

**Eight terms of full-time study** are necessary to complete the EMAC degree program. Calculus I (MATH-1500 or MATH-1010), Contemporary Ideas in Math (MATH-1620) or Calculus II (MATH-1020), and Computer Science (CSCI-1100) or Introduction to Computer Programming (CSCI-1010), and Introduction to Biology (BIOL-1010) are required courses within the Math/Science core. (Note: BIOL-1010 is **not** required if the **first** major is Engineering.)

24 credits Institute Math & Science Core

24 Credits Institute Humanities & Social Sciences Core

16 Credits Open Electives (a minor is possible)

## Digital Storytelling

### **EMAC Core (24 credits)**

#### **Required Courses (16 credits)**

COMM-1510 Intro to Comm. Theory  
 ARTS-1020 Media Studio: Imaging  
 ARTS-1XXX Digital Filmmaking  
 COMM-2610 Intro to Visual Communication

#### **Writing Course (4 credits) (Select one):**

WRIT-2110 Rhetoric and Writing  
 WRIT-4550 Proposing and Persuading  
 WRIT-4xxx Writing for Promotion and Marketing  
 WRIT-1110 Writing for Classroom & Career

#### **Art History or Theory Course (4 credits) (Select one):**

ARTS-2530 Art History  
 ARTS-2540 The Multimedia Century  
 ARTS-4130 New Media Theory

### **Intermediate Courses (16 credits)**

*Select one:*

Any literature course

*And select three courses (at least one from Arts and one from Communication and Media)*

ARTS-2220 Fundamentals of 2D Design  
 ARTS-2040 Intermediate Digital Imaging  
 ARTS-2010 Intermediate Video  
 ARTS-2060 Fundamentals of Animation  
 ARTS-2962 Graphic Storytelling  
 ARTS-2020 Computer Music  
 COMM-2410 Perspectives on Photography  
 LITR-4410 Film Theory  
 COMM-29xx Visual Culture  
 COMM-2440 Documentary Film  
 Another literature course

### **Advanced Courses (12 credits)**

*Select three courses:*

ARTS-4060 Animation I  
 ARTS-4070 Animation II\*  
 ARTS-4080 Art, Community, and Technology\*  
 ARTS-4510 Experimental Game Design\*  
 ARTS-4200 Advanced Drawing  
 ARTS-4630 Writing and Directing for Video  
 ARTS-4040 Rethinking Documentary: Video Production\*  
 ARTS-4020 Advanced Digital 3D Projects\*  
 ARTS-496X Advanced Video\*  
 COMM-4780 Interactive Narrative\*  
 COMM-4660 Visual Literacy  
 COMM-496x Designing Interactive Characters\*  
 LITR-4410 Film Theory\* (*if not taken as an Intermediate Course*)  
 COMM 4300 Communication Internship\*

### **Required Thesis Sequence (8 credits) \***

Thesis courses are designated with an asterisk in the list of Advanced Courses.

Select two thesis courses. Students may also do one thesis course plus an internship.

*Courses may not be used to fulfill both the Thesis and Advanced Course requirements.*

## Marketing Communication and Design

### **EMAC Core (24 credits)**

#### **Required Courses (16 credits)**

COMM-1510 Intro to Comm. Theory  
ARTS-1020 Media Studio: Imaging  
ARTS-1XXX Digital Filmmaking  
COMM-2610 Intro to Visual Communication

#### **Writing Course (4 credits) (Select one):**

WRIT-2110 Rhetoric and Writing  
WRIT-4550 Proposing and Persuading  
WRIT-4xxx Writing for Promotion and Marketing  
WRIT-1110 Writing for Classroom & Career

#### **Art History or Theory Course (4 credits) (Select one):**

ARTS-2530 Art History  
ARTS-2540 The Multimedia Century  
ARTS-4130 New Media Theory

### **Intermediate Courses (16 credits)**

Select:

MGMT 4430 Marketing Principles

*And select three courses (at least one from Arts and one from Communication and Media):*

ARTS-2040 Intermediate Digital Imaging  
ARTS-2010 Intermediate Video  
ARTS-2220 Fundamentals of 2D Design  
COMM-4460 Visual Design  
COMM-4570 Typography  
COMM-4660 Visual Literacy

### **Advanced Courses**

Select one:

MGMT-4490 Advertising Strategies and Promotions  
MGMT-4470 Marketing Research

*And select two courses:*

ARTS-4630 Writing and Directing for Video  
ARTS-4080 Art, Community and Technology\*  
WRIT-4xxx Writing for Promotion and Marketing (*if not used to satisfy Writing Course requirement*)  
ARTS-4xxxx Advanced Digital Imaging  
COMM-4400 Cross-Cultural Graphics  
COMM-4470 Information Design\*  
COMM-4650 Marketing Communication Design\*  
COMM-4660 Visual Literacy \* (*if not used for Intermediate Course*)  
COMM-4690 Interface Design\*  
COMM-4730 Graphic Design for Corporate Identity\*  
COMM-4580 Advertising and Culture\*  
COMM 4300 Communication Internship\*

### **Required Thesis Sequence (8 credits) \***

Thesis courses are designated with an asterisk in the list of Advanced Courses. Select two thesis courses. Students may also do one thesis course plus an internship. *Courses may not be used to fulfill both the Thesis and Advanced Course requirements.*

## Graphic Design

### **EMAC Core (24 credits)**

#### **Required Courses (16 credits)**

COMM 1510 Intro to Comm Theory  
ARTS 1020 Media Studio: Imaging  
ARTS-1XXX Digital Filmmaking  
COMM 2610 Intro to Visual Communication

#### **Writing Course (4 credits) (Select one):**

WRIT 2110 Rhetoric and Writing  
WRIT 4550 Proposing and Persuading  
WRIT 4xxx Writing for Promotion and Marketing  
WRIT 1110 Writing for Career and Classroom

#### **Art History or Theory Course (4 credits) (Select one):**

ARTS 2530 Art History  
ARTS 2540 The Multimedia Century  
ARTS 4130 New Media Theory

### **Intermediate Courses (16 credits)**

**Select two courses (at least one from Arts and one from Communication and Media):**

Select COMM 4570 Typography

Select one:

ARTS 2220 Fundamentals of 2D Design  
COMM 4460 Visual Design

Select two courses from:

ARTS 1200 Basic Drawing  
ARTS 2040 Intermediate Digital Imaging  
ARTS 2010 Intermediate Video  
ARTS 2220 Fundamentals of 2D Design (if not chosen from list above)  
COMM 2620 Color Theory  
COMM 4460 Visual Design (if not chosen from list above)  
COMM 4660 Visual Literacy

### **Advanced Courses (12 credits) (Select three courses):**

ARTS 4630 Writing and Directing for Video  
ARTS 4xxx Advanced Digital Imaging  
ARTS-4080 Art, Community and Technology\*  
COMM 4400 Cross-Cultural Graphics  
WRIT-4xxx Writing for Promotion and Marketing (if not used to satisfy Writing Course requirement)  
COMM 4470 Information Design\*  
COMM 4650 Marketing Communication Design  
COMM 4660 Visual Literacy\* (if not used for Intermediate Course)  
COMM 4690 Interface Design\*  
COMM 4730 Graphic Design for Corporate Identity\*  
COMM 4780 Interactive Narrative\*  
COMM 4580 Advertising and Culture  
COMM 4670 Advanced Typography\*  
COMM 4300 Communication Internship\*

### **Required Thesis Sequence (8 credits) \***

Thesis courses are designated with an asterisk in the list of Advanced Courses.

Select two thesis courses. Students may also do one thesis course plus an internship. **An internship is strongly recommended for this concentration.**

## Interaction Design

### **EMAC Core (24 credits)**

#### **Required Courses (16 credits)**

COMM-1510 Intro to Comm. Theory  
ARTS-1XXX Digital Filmmaking  
ARTS-1020 Media Studio: Imaging  
COMM-2610 Intro to Visual Communication

#### **Writing Course (4 credits) (Select one):**

WRIT-2110 Rhetoric and Writing  
WRIT-4550 Proposing and Persuading  
WRIT-4xxx Writing for Promotion and Marketing  
WRIT-1110 Writing for Classroom & Career

#### **Art History or Theory Course (4 credits) (Select one):**

ARTS-2540 The Multimedia Century  
ARTS-4130 New Media Theory

### **Intermediate Courses (16 credits)**

**Select four courses (at least one from Arts and one from Communication and Media):**

ARTS-1200 Basic Drawing  
ARTS-2010 Intermediate Video  
ART-2020 Computer Music  
ARTS-2040 Intermediate Digital Imaging  
COMM-4963 HCI Implementation: Flash  
ITEC-2210 Introduction to Human Computer Interaction

### **Advanced Courses (12 credits)**

ARTS-4010 Interactive Arts Programming\*  
ARTS-4080 Art, Community and Technology\*  
COMM-4400 Cross-Cultural Graphics\*  
ARTS-4130 New Media Theory (if not used for Art History/Theory)  
COMM-4660 Visual Literacy\*  
COMM-4690 Interface Design\*  
COMM-4780 Interactive Narrative\*  
COMM-4180 Studio Design in HCI\*  
COMM-4710 Communication Design for the WWW\*  
COMM-4770 User Centered Design\*  
COMM-4420 Foundations of HCI Usability\*  
COMM 4300 Communication Internship\*

### **Required Thesis Sequence (8 credits) \***

Thesis courses are designated with an asterisk in the list of Advanced Courses. Select two thesis courses. Students may also do one thesis course plus an internship. *Courses may not be used to fulfill both the Thesis and Advanced Course requirements.*

## Sound Design and Popular Culture

### **EMAC Core (24 credits)**

#### **Required Courses (16 credits)**

COMM-1510 Intro to Comm. Theory  
ARTS-1XXX Music and Sound  
COMM-2610 Intro to Visual Communication  
*Select one of the following:*  
ARTS-1XXX Digital Filmmaking  
ARTS-1020 Media Studio: Imaging

#### **Writing Course (4 credits) (Select one):**

WRIT-2110 Rhetoric and Writing  
WRIT-4550 Proposing and Persuading  
WRIT-4xxx Writing for Promotion and Marketing  
WRIT-1110 Writing for Classroom & Career

#### **Art History or Theory Course (4 credits) (Select one):**

ARTS-2500 History of Western Music  
ARTS-2510 History of Jazz  
ARTS-2520 World Music

### **Intermediate Courses (16 credits)**

*Select four courses (at least one from Arts and one from Communication and Media):*

ARTS-2020 Computer Music  
ARTS-2400 Music Theory I  
ARTS-2500 History of Western Music  
ARTS-2510 History of Jazz  
ARTS-2520 World Music  
COMM-4560 Media and Popular Culture  
LITR-2420 Art of the Film

### **Advanced Courses (12 credits)**

*Select three courses:*

ARTS-4010 Interactive Arts Programming\*  
ARTS-4080 Art, Community and Technology\*  
ARTS-4100 Electronic Arts Theory Seminar (when music topic)  
ARTS-4400 Music Theory II  
ARTS-4410 Deep Listening  
ARTS-496X Advanced Computer Music Topics\*  
ARTS-4030 Multimedia Performance Systems\*  
COMM-4790 Social Impact of Electronic Media  
COMM-4780 Interactive Narrative\*  
LITR-4410 Film Theory\*  
COMM 4300 Communication Internship\*

### **Required Thesis Sequence (8 credits) \***

Thesis courses are designated with an asterisk in the list of Advanced Courses. Select two thesis courses. Students may also do one thesis course plus an internship. *Courses may not be used to fulfill both the Thesis and Advanced Course requirements.*

## EMAC visits

### Virtually

Hit the Web sites for EMAC:

EMAC Home Page

- <http://www.hass.rpi.edu/pl/emac>

Department of the Arts

- <http://www.arts.rpi.edu/>

Department of Communication and Media

- <http://www.llc.rpi.edu/>

Visit the nationally-recognized Rensselaer web site for links to campus publications, clubs, athletics, and student home pages:

- <http://www.rpi.edu/>

Take a virtual campus tour from Admissions:

- <http://www.rpi.edu/tour/index.html>

Set up a campus visit and tour by e-mail with the Rensselaer Admissions Office at [http://admissions.rpi.edu/visitrpi/visit\\_info.html](http://admissions.rpi.edu/visitrpi/visit_info.html).

For more specific questions, email [emac@rpi.edu](mailto:emac@rpi.edu).

### Physically

Call the **Rensselaer Admissions Office** at **(518) 276-6216** to arrange an on-campus information session and tour. Ask to meet some EMAC students and faculty.

A key part of any visit is a tour of the Rensselaer computing facilities. With RensSearch students can search the library on the web anytime.

You won't want to miss the state-of-the-art Visualization, Animation, & Simulation Technology (VAST) Studio, and the Experimental Media and Performing Arts Center (EMPAC) <http://www.empac.rpi.edu/> . See the EMAC, HA&SS or EMPAC websites for details on facilities.