Preparing Professionals One Student at a Time

Graphic Communication at Carroll University is an interdisciplinary major from the graphic communication, art, business, communication, computer science, and English programs. This major is offered in conjunction with a required 160-hour internship and a capstone experience in which students independently create a real world project. The two minors offered within Graphic Communication are aimed toward students who plan to major in other academic programs and acknowledge the integrated usefulness of Graphic Communication within their major area of study.

Learning Outcomes for Graphic Communication

Upon graduation, the graphic communication student will be able to:

1. Measurably demonstrate and apply a high competency working knowledge of various digital software applications and hardware components.
2. Measurably demonstrate and apply industry-standard graphic design principles as they pertain to various digital media vehicles.
3. Apply learning outcome skill sets to produce digital media projects for the purpose of communication on behalf of client/audience objectives.
4. Create communication-based creative solutions to effectively broadcast specific messages that utilize typography, color, digital photography, images, digital video and print.
5. Utilizing historical documentation for reference, case studies for application, and examples of industry trends, students will apply their skill set to create messages that communicate across a variety of media.
6. Utilizing "real world" strategy, concept and application, students will implement their skill set of technology, understanding of design theory, identification with audience, and association with various delivery methods to produce graphic communication materials that best represent client goals.
7. Pay special attention to and evaluate software and hardware capabilities, lifespan, and usefulness, which will guide them to an understanding of the role of graphic design management.
8. Participate in the writing of creative briefs, apply the dynamics of communication practices, as well as investigate and understand the role of branding, marketing, and advertising.
9. Utilize website construction software and apply the appropriate skill set to develop online portfolios and client-based solutions.
10. Develop the ability to think critically, to problem solve, and to generate creative solutions.
The graphic communication program has numerous offerings which teach students the use of various tools needed in graphic communication in the 21st century. The art, business, computer science and communication programs use these tools to develop students' talents and the business program's courses cover the use of graphic communication in the world of organizations. Each course within the curriculum uses the technology of the 21st century to achieve its objectives.

There are five emphases within graphic communication:

- The **graphic design emphasis** is for students interested in using their artistic bridging technology and graphic communication skills across a variety of media (print, web, new media, etc.). They may work as graphic artists, as web page designers or as desktop publishing professionals. Students may also consider a second major or a minor in computer science.

- The **design management emphasis** is for students who wish to evolve their graphic communication skills into management positions or start their own company. Students wishing to excel in this area may consider a second major or minor in business.

- The **digital video production emphasis** is for students who wish to pursue employment within the video, film or television work environments. At the completion of the program, students will be proficient at video editing, audio editing, lighting, animation, green screen, storyboards, talent assessment, and marketing. Students must create and showcase a film reel portfolio of their work during their senior year.

- The **print management emphasis** is for students wishing to enter the print industry and is a collaborative program with Waukesha County Technical College. The print management emphasis is based upon both the actual operation of print presses as well as design/management/business concepts.

- The **web design emphasis** is for students who particularly wish to develop projects for placement on the World Wide Web. Students wishing to excel in this area may consider a second major or minor in business or computer science.

**Graphic Communication Major**

**Bachelor of Science**

**Graphic Communication Emphasis (74 credits)**

Graphic Communication 106, Introduction to Communication Technology (2 credits)  
Graphic Communication 150, Digital Toolbox: Photoshop and Illustrator I  
Graphic Communication 200, Color and Typography  
Graphic Communication 210, History of Graphic Design (2 credits)  
Graphic Communication 230, Digital Photography  
Graphic Communication 290, Digital Toolbox: Photoshop and Illustrator II  
Graphic Communication 295, 3D Digital Design  
Graphic Communication 320, Introduction to Multimedia Production  
Graphic Communication 330, Digital Video I  
Graphic Communication 340, Digital Video II  
Graphic Communication 360, Digital Flash Gaming
Graphic Communication 450, Projects for Graphic Communication Majors
Graphic Communication 480, Internship (4 credit hours required)

Required Support Courses
Accounting 105, Introduction to Accounting Basics (2 credits)
Art 106, Drawing and Composition
Art 107, 2D and 3D Design
Art 206, Intermediate Drawing
Business 101, Introduction to Business
Business 301, Principles of Marketing
Mathematics 112, Introduction to Statistics

Design Management Emphasis (70 credits)
Graphic Communication 106, Introduction to Communication Technology (2 credits)
Graphic Communication 150, Digital Toolbox: Photoshop and Illustrator I
Graphic Communication 200, Color and Typography
Graphic Communication 320, Introduction to Multimedia Production
Graphic Communication 450, Projects for Graphic Communication Majors
Graphic Communication 480, Internship (4 credit hours required)

Required Support Courses
Accounting 105, Introduction to Accounting Basics (2 credits)
Art 106, Drawing and Composition
Art 107, 2D and 3D Design
Art 206, Intermediate Drawing
Business 101, Introduction to Business
Business 301, Principles of Marketing
Business 302, Principles of Management
Business 320, Promotion Management
Communication 203, Advertising
Communication 227, Technical Writing in Organizations
Computer Science 107, Problem Solving Using Information Technology
Mathematics 112, Introduction to Statistics

Digital Video Production Emphasis (70 credits)
Graphic Communication 150, Digital Toolbox: Photoshop and Illustrator I
Graphic Communication 290, Digital Toolbox: Photoshop and Illustrator II
Graphic Communication 295, 3D Digital Design
Graphic Communication 320, Introduction to Multimedia Production
Graphic Communication 330, Digital Video I
Graphic Communication 340, Digital Video II
Graphic Communication 350, Digital Video III
Graphic Communication 355, Digital Video IV
Graphic Communication 450, Projects for Graphic Communication Majors
Graphic Communication 480, Internship (4 credit hours required)
Required Support Courses
Accounting 105, Introduction to Accounting Basics (2 credits)
Art 209, Photography
Communication 217, Film Critique/Film Review & Analysis
English 206, Fiction Writing

Print Management Emphasis (65 credits)
Graphic Communication 106, Introduction to Communication Technology (2 credits)
GRC 110 (WCTC204110) Print Media/Digital Publishing I
GRC 120 (WCTC204120) Print Media II
GRC 121 (WCTC204121) Digital Illustration
GRC 122 (WCTC204122) Post Press/Distribution
GRC 130 (WCTC204130) Print Media III
GRC 135 (WCTC204139) Digital Workflows
GRC 140 (WCTC204140) Estimating and Scheduling
GRC 141 (WCTC204141) Production Coordination/Customer Service
GRC 142 (WCTC204142) Color Management
Graphic Communication 450, Projects for Graphic Communication Majors
Graphic Communication 480, Internship (4 credit hours required)

Required Support Courses
Accounting 205, Financial Accounting
Business 101, Introduction to Business
Business 301, Principles of Marketing
Business 302, Principles of Management
Business 305, Principles of Operation Management
Computer Science 107, Problem Solving Using Information Technology (2 credits)
Computer Science 109, Technological Productivity (2 credits)
Mathematics 112, Introduction to Statistics

Web Design Emphasis (64 credits)
Graphic Communication 106, Introduction to Communication Technology (2 credits)
Graphic Communication 150, Digital Toolbox: Photoshop and Illustrator I
Graphic Communication 200, Color and Typography
Graphic Communication 320, Introduction to Multimedia Production
Graphic Communication 330, Digital Video I or
   Graphic Communication 295, 3D Digital Design
Graphic Communication 360, Digital Flash Gaming
Graphic Communication 450, Projects for Graphic Communication Majors
Graphic Communication 480, Internship (4 credit hours required)

Required Support Courses
Art 106, Drawing and Composition
Art 107, 2D and 3D Design
Communication 370, Communication Technology and Society
Computer Science 109, Technological Productivity (2 credits)
Computer Science 110, Problem Solving through Programming
Computer Science 220, Information Systems  
Computer Science 319, World Wide Web Programming  
Computer Science 351, Database Design  
Mathematics 112, Introduction to Statistics

**Graphic Design Minor (20 credits)**

Graphic Communication 106, Introduction to Communication Technology (2 credits)  
Graphic Communication 150, Digital Toolbox Photoshop and Illustrator I  
Graphic Communication 200, Color and Typography  
Graphic Communication 210, History of Graphic Design (2 credits)  
Graphic Communication 230, Digital Photography or  
  Graphic Communication 330, Digital Video  
Graphic Communication 320, Introduction to Multimedia

**Web Design Minor (20 credits)**

Computer Science 109, Technological Productivity (2 credits)  
Graphic Communication 106, Introduction to Communication Technology (2 credits)  
Graphic Communication 150, Digital Toolbox Photoshop and Illustrator I  
Graphic Communication 200, Color and Typography  
Graphic Communication 320, Introduction to Multimedia  
Graphic Communication 360, Digital Flash Gaming

106. **Introduction to Communication Technology**  2 credits  
This class provides an introduction to numerous computer applications (Adobe Creative Suite) used within the field of digital communication. Special emphasis will be placed on desktop publishing software, history of graphic design, inter-environment communications, graphics formats and file handling software. (Fa, Sp, Su)

150. **Digital Toolbox: Photoshop and Illustrator I**  4 credits  
This course introduces Graphic Communication students to the professional design tools used by current design industry. Students will learn the differences between the raster and vector applications and the uses of each, how to access/utilize various color systems (print and web), and prepare files for final production within print, web, and multimedia. (Fa, Sp, Su)

200. **Color and Typography**  4 credits  
Color and Typography will explore, in detail, two of the four primary elements in digital media: the implementation of color and use of typography. Use of additive, subtractive and Pantone colors will comprise the color portion of the course; examination into word/letterforms, typefaces, and comprehension studies will comprise the typography portion of the course. (Sp) Prerequisite: GRC 150.

210. **History of Graphic Design**  2 credits  
The history of Graphic Design begins with cave markings from approximately 200,000 years ago and continues through to today’s digital technology processes. Students will investigate specific periods in graphic design history, explore historic methods in communication, and be introduced to the global influences in graphic design. (Fa)
230. Digital Photography 4 credits
Digital Photography is designed to develop a student’s skills in digital photography and its uses within print and digital presentations. Throughout the course of the semester, students will learn the differences between film and digital cameras, digital photo editing techniques, aesthetic qualities of photography, and the tools associated with digital photography. Students will learn to digitally capture images among a variety of photographic situations. Students will also learn how to prepare images for print and onscreen presentation. ($60 course fee) (Sp)

290. Digital Toolbox: Photoshop and Illustrator II 4 credits
Students will build upon their skill set acquired in Digital Toolbox Photoshop and Illustrator I. Students will explore animation, web image development, paths and shapes creation, print file preparation, automation, and execution into other digital vehicles. Students will create a variety of projects that emphasize the importance of communication and audience. Prerequisite: GRC 150 for GRC Majors; ART 250 for Art Majors. (Sp)

295. 3D Digital Design 4 credits
3D Digital Design affords students the opportunity to create realistic environments, characters, and objects using state-of-the-art software. Students will learn to model, paint, sculpt, render and animate for environmental design, package design, gaming, product design, and industrial design. (Fa)

320. Introduction to Multimedia Production 4 credits
This course is designed as a Graphic Communication course, emphasizing artistic production using web development software (Adobe Dreamweaver), including, but not limited to: animation, digital video, and creating multimedia presentations and artworks. Multimedia, for the purposes of this course, means utilizing more than one of the following media elements: sound, images, text, video, animation, and/or interactivity, in all projects. Emphasis will be on the marriage of sound design, sophisticated content and visual interest. (Fa) Prerequisite: ART 250, GRC 106, or GRC 150.

330. Digital Video I 4 credits
Students will learn how to use storyboarding techniques to develop short video project, videotape indoor and outdoor scripted scenes, edit digital video using iMovie, enhance audio, upload video to their own websites, and create DVDs/VCDs. Students will learn to identify scenes and still images that work best in a video project. Students will develop short video projects for specific and general audiences alike. (Fa)

340. Digital Video II 4 credits
Students will utilize skill sets learned in Digital Video 1 to create two documentaries utilizing Final Cut Pro Studio 2 (the industry standard in video production). Students will learn the elements of defining and writing storyboards and develop scene scripting for two one-hour documentaries that address public issues. Students will learn interviewing techniques, hone video production skills, and learn the latest trends/techniques in producing social awareness videos. (Sp)
350. Digital Video III  
Digital Video III will continue the path outlined for a student's understanding of producing works for personal and commercial video work. Students will learn how to develop short and long video projects, develop greater skill in editing techniques (audio and video), work in detail with lighting (available and supplemental), and be introduced to special effects through Adobe After Effects including work with green screen capabilities. In addition to the video projects, students will produce one written essay. (Fa) Prerequisite: GRC 330 and GRC 340.

355. Digital Video IV  
Digital Video IV culminates in the production of one original 30-minute video (documentary, comedy, fiction, drama, historical, horror, science fiction). Students will work in pairs to produce the video. The result will be an exhibition in Waukesha, and will be open to the public. Additionally, students will work with theater majors as talent to complete this project. The overall learning objective if this course is to (1) demonstrate an understanding of the complexity, depth, and structure of producing a long video project, (2) produce an original screenplay for a long video project, (3) secure a dynamic working relationship with talent and team members, (4) exhibit and establish professional relationship with cinema professionals video screening, (5) oversee and create advertising and marketing materials for the long video project, (6) create and continually update a blog about the experience. (Sp) Prerequisite: GRC 330, GRC 340, GRC 350.

360. Digital Flash Gaming  
Students will utilize skills learned in GRC 320 to create Adobe Flash games for creative marketing application and entertainment. In addition to creating flash games, students will learn how to upload files for general audience use. Students will be assigned specific marketing projects for their Adobe Flash games for use across a wide variety of digital vehicles. Other Flash projects may be assigned during the semester to expand the student's understanding of techniques and objectives. (Sp)

391/491. Special Topics  
Study of a selected topic not covered in the regular curriculum. The topic will be announced prior to the beginning of the semester. Four credits maximum will apply toward degree. Prerequisite: Consent of instructor.

450. Capstone: Projects for Graphic Communication Majors  
A seminar intended to consolidate and expand your experience and education as well as a foundation for continued research as you prepare to enter your chosen field. (Sp) Prerequisites: All program requirements completed.

480. Internship in Graphic Communication  
Students must complete a minimum of four credits (160 hours) of internship work while at Carroll University. The internship course involves professional work experience in your field under the supervision of faculty and industry personnel. Course is repeatable to a maximum of 12 credits. Each four credits should have substantially different learning experiences. 160 hours of internship work experience is expected for
every 4 credit hours attempted. (Fa, Sp, Su) Prerequisites: Junior or senior standing and director approval. Grading is S/U.

Courses offered at Waukesha County Technical College

GRC 110 (WCTC204110). Print Media/Digital Publishing I 3 credits
Study offset lithography, flexography, and digital printing. Compare and contrast the advantages and disadvantages of the printing methods of gravure, and screen-printing. Produce single, two- and four-color printed pieces. Acquire knowledge relating to CTP, the PMS system, screens, halftones, print careers, print economics and the four-color process.

GRC 120 (WCTC204120). Print Media II 3 credits
Print single and multicolored projects using primarily Heidelberg Printmaster GTO2 color 20-inch presses. Study the common elements of all presses the feeder, registration, printing, and delivery systems. Learn basic press maintenance and problem solving, pressroom chemistry, and safety. Become familiar with paper of various kinds, weights, textures, and sizes, as well as various types of ink. Prerequisites: GRC 106.

GRC 121 (WCTC204121). Digital Illustration 3 credits
Enhance ability to draw on the computer with Adobe Illustrator. Learn how to apply various filters and colors to objects; create masks around objects; use the transformation tools (rotate, scale, reflect, shear, blend); create compounds and make special dashed lines to create many special effects. Prerequisites: ART 250 and GRC 106.

GRC 122 (WCTC204122). Post Press/Distribution 3 credits
Explore current and emerging technologies for binding, finishing, and distributing printed materials. Learn the basic operations of commercial bindery and finishing equipment.

GRC 130 (WCTC204130). Print Media III 3 credits
Use a computerized press console to set up and operate a Heidelberg SM742 color perfecting press. Reproduce high quality line and halftone copy in multiple colors on a Komori Sprint 262 color, a Heidelberg Printmaster GTO 525 color and other two-color presses. Discuss flexographic printing and platemaking.

GRC 135 (WCTC204139). Digital Workflows 3 credits
Study computer integrated manufacturing technologies as applied to commercial printing production problems. Discuss preflighting, trapping, and imposition. Learn to properly prepare and analyze digital files for output to eliminate problems that can occur during the printing production process. Prerequisites: 204121 Digital Illustration and 204131 ImageEditing/Photoshop.

GRC 140 (WCTC204140). Estimating and Scheduling 3 credits
Examine the scope and functions of printing estimating. Estimate, cost, and price various printing services. Discuss topics including computers for production and management, developing a cost estimating system, estimating paper, ink electronic pre-
press, press and finishing operations, and marketing and management issues. Analyze various operations within the printing industry. Prerequisites: 204139 Digital Workflows.

**GRC 141 (WCTC204141). Production Coordination/ Customer Service**
3 credits

Explore the commercial printing manufacturing process. Examine the role and function of the customer service representative, electronic workflows, and time requirements for production of commercially printed products that are within budget. Prerequisites: 204122 Post Press/Distribution, 204130 Print Media.

**GRC 142 (WCTC204142). Color Management**
3 credits

Combine math, physics, and chemistry concepts with measurement and statistical process control methods to appraise, control, and improve color reproduction. Learn to use and work with densitometers, spectrodensitometers, spectrophotometers, tone reproduction control software, and color measurement software.