

Graphic Communications

Curriculum Guide

Program Description

MCTI's Graphic Communications Program is run like a print shop. In this production environment, students develop job competencies, while operating specialized printing equipment.

In Offset and Bindery courses, students produce brochures, booklets, forms, and other commercial printed products.

In flexographic courses, students produce labels and multi-colored packaging products.

In Screen Printing courses, students print on T-shirts, signs and a variety of other materials and products.

Graphic Communications Program Admission Requirements: None

U.S. Department of Labor Occupational Profile:

Students who most closely match the occupational profile for a Printing Machine Operator are selected for enrollment.

- **Aptitude/Abilities:** Mechanical, manual dexterity, motor coordination, color and form perception, computer literate, numeric, task planning/organizing, attention to detail
- **Work Keys:** Reading/Locating Information/Applied Math – 3
- **CASAS Scaled Scores:** Reading 216-225, Math 226-235
- **Environment:** Loud, fumes, machine operation
- **Physical Demands:** Medium
- **Temperament:** Performs a variety of tasks; is able to execute precision work

Certificate of Completion Programs (SOC Code):

- Bindery/Finishing Worker (51-5113)
- Screen Printer (51-5112)
- Offset Press Assistant (51-5100)
- Flexo Press Assistant (51-5100)
- Press Operator (51-5112)

Graphic Communications students are usually in the program for three terms and earn multiple certificates during those three terms. Students take core courses during the first term. Based on skills, abilities, and interests, those students who demonstrate academic progress by maintaining a grade point average of 2.0 or better and good employability skills may advance to the second term.

Students may exit after the second term with a Bindery/Finishing Worker certificate or both. Students who demonstrate academic progress and good employability skills may be invited to advance to the next term to earn one or more of the following certificates: Screen Printer, Offset Press Assistant and/or Flexo-Press Assistant certificate.

Students who have successfully completed all core courses, second term courses, and Option 1 third term courses may be invited to a fourth term to work on the Press Operator certificate.

Required Courses for Certification

Students must demonstrate academic progress (satisfactory grade point average) and good employability skills to advance from term to term.

Core Courses (First Term)

Course Number	Course Name	Credits
EC-134A	Graphic Communications Trade Math	2
GC-100	Layout and Design	4
GC-105	Introduction to Graphic Communication	4
GC-110	Introduction to Screen Printing	4

(Second Term)

Course Number	Course Name	Credits
GC-205A	Bindery and Finishing Operations	3
GC-210A	Screen Printing Lab	3
GC-215A	Offset Press Operation	3
GC-220A	Flexographic Press Operation	3

Option 1: (Third Term)

Course Number	Course Name	Credits
GC 300	Advanced Offset Press Operations	4
GC 305	Advanced Flexographic Press Operations	4
GC 320	Advanced Screen Printing	4

Option 2: (Third Term)

Course Number	Course Name	Credits
GC-310	Production Printing	4
Must take two of the following courses:		
GC 300	Advanced Offset Press Operations	4
GC 305	Advanced Flexographic Press Operations	4
GC 320	Advanced Screen Printing	4

Invitation Only: (Fourth Term)

Course Number	Course Name	Credits
GC 310	Production Printing	4
Must take electives equal to at least 8 credits		

Electives (Instructor Approval)

Course Number	Course Name	Credits
GC-120	Customer Service	4
GC-401	Special Press Projects	4
GC-680	Independent Study	6 - 12
GC-690	Work Internship	4-12

Certificate Requirements: Students must complete the designated courses with a C- or better and an accumulated grade point average of a 2.0 to earn each certificate.

Bindery/Finishing Worker Certificate

Core Courses
GC-205 A Bindery and Finishing Operations

Screen Printer Certificate:

Core Courses
GC-210A Screen Printing Lab
GC-320 Advanced Screen Printing

Offset Press Assistant Certificate:

Core Courses
GC- 215A Offset Press Operation
GC- 300 Advanced Offset Press Operations

Flexo Press Assistant Certificate:

Core Courses
GC-220A Flexographic Press Operation
GC- 305 Advanced Flexographic Press Operation

Press Operator Certificate:

Core Courses
All Second Term Courses
Option 1 Third Term Courses
GC-310 Production Printing

Instructors, program managers, and/or the referring counselor may recommend employability skills and elective classes based on the student's needs, abilities, interest and behaviors. Job Seeking Skills is required for all students anticipating to graduate from MCTI.

Course Descriptions

EC-134A Graphic Communications Trade Math

This course is a practical math course focused on common problems encountered in the printing field. Initial emphasis is placed on using a measurement tool to accurately measure given lengths. Basic math skills are applied and strengthened using a step-by-step approach. **Topics covered:** measurement of various lengths and the use of whole numbers, common fractions, and decimal fractions

GC-100 Layout and Design

Students with little/no experience in graphic communications learn the basic skills required to work in the field. This hands-on course focuses on applying common terminology, measuring and copy preparation. Emphasis is placed on working safely and neatly. **Topics covered:** page lay-out, copy preparation, measuring, typography, common terminology, safety, neatness and accuracy, computers, use of common tools and equipment

GC-105 Introduction to Graphic Communications

In this course, students learn the basics of press and copier operations and explore career options. The course is a mix between self-paced instruction using computers, instructor-led classroom activities, demonstrations and hands-on activities. Students run a press or copier under the supervision of an instructor. **Topics covered:** terminology, screen, flexographic, lithographic, digital, and copier concepts.

GC-110 Intro to Screen Printing

This hands-on course focuses on producing screen prints on a variety of materials and products. Students work on and complete screen printing jobs in a production environment. **Topics covered:** safety, quality, screen preparation, substrates, inks and additives, use and maintenance of screen printers, keeping the shop clean, teamwork.

GC-120 Customer Service

This course is designed for students who have demonstrated competency in screen printing, press operation and/or bindery/finishing. This course is a mix of hands-on and computer activities as they relate to customer service in the printing industry. **Topics covered:** quality control, organization, writing skills, phone skills, job tickets, job planning

GC-205A Bindery and Finishing Operations

In the hands-on course, students develop operator skills using a wide range of finishing and bindery equipment typically found in small and midsize graphic communications companies. Students who complete the course should be able to work independently as a Bindery/Finishing Worker. **Topics covered:** safety, quality control, organization, paper, cutters, figuring best cut, folders, binding, delivery of finished product

GC-210A Screen Printing Lab

This hands-on course is for students experienced in screen printing. Students work independently (without supervision) to produce screen prints on a variety of materials and products. Work is completed on actual jobs in a production environment. **Topics covered:** safety, quality, production speed, screen preparation, substrates, inks and additives, use and maintenance of screen printers, keeping the shop clean, teamwork.

GC-215A Offset Press Operation

This course is for students who know the basics and are ready to prepare for a job as a press operator or assistant. This course is a mix of computer simulation and hands-on activities related to press operation, maintenance and troubleshooting. Students gain confidence in working around presses with indirect supervision. **Topics covered:** safety, press equipment (e.g., cleaning, maintenance, set up, operation, and troubleshooting).

GC-220A Flexographic Press Operation

Students, who know the basics, learn flexographic press operation to prepare for a job as a press operator or assistant. The course is a mix of self-paced text instruction, computer simulation, and hands-on activities related to press operation, maintenance, and troubleshooting. Students gain confidence working around presses with indirect supervision. **Topics covered:** safety, flexographic presses; plate making; press operation, maintenance, and troubleshooting; keeping the work environment clean and organized

GC-300 Advanced Offset Press Operations

This course is for students who have demonstrated competency in offset press operation and who plan to pursue a job as a press operator. The course is a mix of computer simulation and hands-on activities related to press operation, maintenance and troubleshooting. Students gain confidence working around presses with minimum supervision. **Topics covered:** safety, press equipment (e.g., cleaning, maintenance, set up, operation, troubleshooting), production scheduling.

GC-305 Advanced Flexographic Press Operations

This course is for students who have demonstrated competency in flexographic press operations. The course is a mix of self-paced text instruction, computer simulation, and hands-on activities related to press operation, maintenance and troubleshooting. Students gain confidence working around presses with minimum supervision. **Topics covered:** safety, flexographic presses, dies, ink handling, press operation, maintenance and troubleshooting, keeping the work environment clean and organized

GC-310 Production Printing

This course is for students who have demonstrated competency in press and bindery operations. This course is a mix of hands-on activities that build skill in production and job planning. Students gain confidence in working around MCTI press equipment with minimum supervision. **Topics covered:** safety, troubleshooting, production planning, delivery, quality control, organization skills, keeping the work environment clean

GC-320 Advanced Screen Printing

This course is for students who have demonstrated competency in screen printing. The course is a mix of hands-on activities related to press operation, maintenance and troubleshooting. Students gain confidence working around screen presses and related equipment with minimum supervision. **Topics covered:** safety, screen press equipment and attachments (e.g., cleaning, maintenance, set up, operation, troubleshooting, production scheduling

GC-400 Pre-Press

This course is for students who have demonstrated competency as a press assistant and bindery/finishing worker or who have a strong understanding of the industry. This hands-on course focuses on using the computer to prepare copy for printing. **Topics covered:** computers, file maintenance, Photoshop, illustration programs, layout programs, fonts, image assembly, proofing, plate making, terminology

GC-401 Special Press Projects

This course is for students who have demonstrated competency as a press assistant, bindery/ finishing worker and/or screen printer. This hands-on course focuses on producing complex print jobs using a variety of equipment. **Topics covered:** preparation, press operation, troubleshooting, finishing operations, shipping

GC-680 Independent Study

Independent study for students enrolled in the Graphic Communications program who need additional instruction/practice to build skills. Specific course content and work-related projects are individualized based on the student's ability, interest and need. **Topics or skills used may include:** press operation, pre-press operations, screen printing, bindery and finishing operations.

GC- 690 Work Internship

Independent This course is designed for students enrolled in Graphic Communications and who want to apply skills learned in a business setting. Students have a chance to build proficiency while working in an actual shop environment. The internship is individualized based on the student's ability and interest and the business need. **Topics or skills used may include:** Any Graphic Communication skill or topic