

Printing

Program Number: 31-204-1

One-Year Technical Diploma

Applied Arts Program Cluster

Center for Business and Applied Arts

Program offered at Madison Campuses

For information call: (608) 246-6003 or
(800) 322-6282 Ext. 6003

About the Program

The Technical Diploma Printing program offers the knowledge and skills required for an entry level position in the graphic arts industry. Students receive training in all steps of sheet-fed offset lithographic reproduction. Additional on-the-job training will be necessary. Technological advances are changing the production procedures, making employee retraining critical.

This growing industry is ranked among the top five in the nation today. Plants ranging from small shops to those employing thousands of workers are located in communities of all sizes throughout the country. They manufacture a wide array of products including books, brochures, advertising magazines, newspapers and packaging, to name a few. People in this field must adapt to technological changes. Positions call for a wide range of skills and aptitudes.

The successful employee will be a detail-oriented problem solving team player with good communication skills. These jobs can require mechanical ability and hand-eye coordination. Graduates can specialize in one area after graduation.

Unique Requirements for Graduation

Twenty-eight credits with a cumulative GPA of 2.0 (C) or above. Average of 2.0 (C) or above for occupational specific courses.

Curriculum

		Credits	Hrs/week Lec-Lab
First Semester			
10-204-114	Prepress Preparation.....	2	2-0
10-204-116	Lithographic Press Systems.....	3	1-3
10-204-121	Electronic Prepress Techniques 1.....	4	1-3
10-204-133	Finishing and Machine Basics.....	2	1-1
10-204-192	Printing Processes.....	1	1-0
10-801-195	Written Communication.....	3	3-0
Semester Total		15	
Second Semester			
10-204-126	Press and Finishing Techniques 1.....	3	1-3
10-204-129	Electronic Prepress Techniques 2.....	4	1-3
10-204-194	Industrial Orientation.....	3	1-3
10-804-106	Intro to College Math.....	3	3-0
Semester Total		13	

Note: Students are placed in English or mathematics courses based on their scores on the COMPASS or ASSET test or on completion of the appropriate prerequisite/s.

Program Courses

10-204-114 Prepress Preparation 2 credits

An elementary course in preparatory graphic procedures. Students will learn type terminology, anatomy, classification, markup, and measurement. They will be exposed to proofreader's marks and methods. Some basic elements of preparing computer files to enter production will also be covered. Corequisites: 10-204-116 and 10-204-121.

10-204-116 Lithographic Press Systems 3 credits

A basic course in small offset lithographic press operation. Tool identification and proper use are incorporated into daily activities. Identification, selection and handling techniques for chemicals are emphasized. Instruction includes pressroom procedures, safety issues and OSHA standards. Simple projects will be run on press to teach setup, single-color printing and cleanup. Emphasis in on press adjustments for high quality printing. Related topics include paper handling, press maintenance, and interpreting job specifications. Corequisite: 10-204-133.

10-204-121 Electronic Prepress Techniques 1 4 credits

An introduction to computer image assembly for the graphic arts industry. This course covers computer terminology, hardware and software. Students use QuarkXPress and InDesign to create basic layouts, navigating through an electronic environment. Projects and discussions integrate creating and following a job ticket with digital imposition for the offset sheet-fed lithographic printing process. Proofs and plates made in this class will be run in future press courses. Corequisites: 10-204-114

10-204-126 Press and Finishing Techniques 1 3 credits

A continuation of Lithographic Press Systems (204-116). Includes press and finishing work in: small press setup and operation and cleanup for two color jobs, basic press maintenance, beginning pressroom quality control issues, finishing operations, paper issues in the pressroom and basic press impositions. Prerequisite: 10-204-116.

10-204-129 Electronic Prepress Techniques 2 4 credits

Students lay out pages using QuarkXPress and InDesign, imaging them to various printers, proofing and plate output devices. Projects involve application of color, blends, master pages and style sheets. Assignments include single- and two-color jobs, single- and two-sided jobs, and producing and assembling multicolored proofs. Images for press plates will be generated using computer-to-plate technology. Prerequisite: 10-204-121.

10-204-133 Finishing and Machine Basics 2 credits

An introductory stand-alone class that covers a variety of subjects supportive to the program and other courses. Topics cover paper basics, various measurement systems and binding processes. Students will learn to operate paper cutters, paper drills, folders and shrink wrappers to finish printed jobs. Other activities include: padding, lab time to complete project work from other course. Corequisite: 10-204-116.

10-204-192 Printing Processes 1 credit

An overview of printing and related technologies, past and present, most of which we cannot do in our laboratory. Various methods and uses of image transfer are compared and contrasted, and related processes discussed. Among the topics covered will be: the PMS system, screens, halftones, process color, lithography, letterpress, flexography, gravure, silkscreen, die cutting, foil stamping, embossing, thermography, coatings and case binding.

10-204-194 Industrial Orientation 3 credits

This course is designed to guide you through the "etiquette" required for success in the skilled trade job market and to prepare you for work in an industrial setting. We will make the tools necessary to foster success as you progress in your career and assemble them in a folder. Other discussion topics include possible solutions to problems that can occur in a job setting, personality testing required in some application processes and common benefit packages. Prerequisites: all first-semester printing courses.

Career Potential:

- **Sales Representative**
Establishes new customer base and serves present customers.
- **Biller**
Calculates costs and prepares accounts for billing.
- **Electronic Prepress Technician**
Lays out jobs on computer and generates film for production.
- **Proofer**
Exposes and assembles proofs.
- **Platemaker**
Imposes plates to run on press.
- **Press Operator**
Sets up and operates sheet-fed presses.
- **Finishing Operator**
Sets up and operates a variety of bindery and finishing equipment.
- **Distribution Technician**
Sorts, prepares and/or delivers finished product.

More detailed and updated information on this program may be available at: matcmadison.edu. The college reserves the right to make changes in the regulations and courses announced in this publication without notice.

Madison Area Technical College provides equal opportunity in education and employment.

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