

**DEKALB TECHNICAL COLLEGE**  
*Clarkston Campus*

**DRAFTING**  
**ASSOCIATE IN APPLIED SCIENCE DEGREE**

The Drafting program is designed to prepare students for employment in a variety of positions in the drafting field. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting. Program graduates receive a Drafting Associate in Applied Science degree.

<u>Course Number</u>	<u>Course</u>	<u>Class Hours</u>	<u>Lab Hours</u>	<u>Total Hours</u>	<u>Credit Hours</u>	<u>Prerequisites/Corequisites</u>
<b>FIRST QUARTER</b>						
DDF 101	Introduction to Drafting	20	80	100	6	
DDF 102	Size and Shape Description I	10	90	100	5	DDF 101
SCT 100	Introduction to Microcomputers	<u>10</u>	<u>40</u>	<u>50</u>	<u>3</u>	
	<b>TOTAL</b>	40	210	250	14	
<b>SECOND QUARTER</b>						
DDF 107	Introduction to CAD	20	80	100	6	DDF 102, SCT 100
DDF 111	Intermediate CAD	20	80	100	6	DDF 107
MAT 191	College Algebra	<u>50</u>	<u>0</u>	<u>50</u>	<u>5</u>	*, See catalog
	<b>TOTAL</b>	90	160	250	17	
<b>THIRD QUARTER</b>						
DDF 103	Size and Shape Description II <b>OR</b>	10	90	100	5	DDF 102
DDS 201	Strength of Materials	( 50)	( 0)	( 50)	( 5)	ENG 101 or 191, MAT 104 or 191
ENG 191	Composition and Rhetoric I	50	0	50	5	*, See catalog for pre-reqs
MAT 194	Pre-Calculus	<u>50</u>	<u>0</u>	<u>50</u>	<u>5</u>	MAT 191 w/ minimum grade of "C"
	<b>TOTAL</b>	110	90	200	15	

**Student must choose from one of the following specializations**

**MECHANICAL DRAFTING SPECIALIZATION**

<b>FOURTH QUARTER</b>						
DDF 112M	3-D Drawing and Modeling	20	80	100	6	DDF 111
DDF 105	Auxiliary Views	10	40	50	3	DDF 103
SPC 191	Fundamentals of Speech <b>OR</b>					
ENG 195	Technical Writing	50	0	50	5	ENG 191, SCT 100
PHY 190	Introductory Physics <b>OR</b>					
PHY 191	Mechanics	<u>40</u>	<u>30</u>	<u>70</u>	<u>5</u>	MAT 191 or MAT 196
	<b>TOTAL</b>	120	150	270	19	
<b>FIFTH QUARTER</b>						
DDF 108	Intersections and Development	10	90	100	5	DDF 103, MAT 104 or 191
DDF 109	Assembly Drawing I	10	90	100	5	DDF 108
HUM 191	Introduction to Humanities	<u>50</u>	<u>0</u>	<u>50</u>	<u>5</u>	ENG 191 w/ minimum grade of "C"
	<b>TOTAL</b>	60	180	250	15	
<b>SIXTH QUARTER</b>						
DDF 106	Fasteners	10	40	50	6	DDF 105
PSY 191	Introductory Psychology <b>OR</b>					
SOC 191	Introduction to Sociology <b>OR</b>					
ECO 191	Principles of Economics	50	0	50	5	*
XXX XXX	Elective				<u>5</u>	
	<b>TOTAL</b>	60+	40+	100+	16	

**ARCHITECTURAL DRAFTING SPECIALIZATION**

<b>FOURTH QUARTER</b>						
DDS 205	Residential Architectural Drawing	20	80	100	6	DDF 111, DDF 112, DDS 201, ENG 101 or 191, MAT 104 or 191
DDF 112A	3-D Drawing and Modeling	20	80	100	6	DDF 111
SPC 191	Fundamentals of Speech <b>OR</b>					
ENG 195	Technical Writing	<u>50</u>	<u>0</u>	<u>50</u>	<u>5</u>	ENG 191, SCT 100
	<b>TOTAL</b>	90	160	250	17	

**DEKALB TECHNICAL COLLEGE**  
**Clarkston Campus**

**FIFTH QUARTER**

DDS 207	Mechanical Systems for Architecture	10	40	50	3	DDS 205, DDS 206, PHY 221 ir 191
DDS 208	Residential Architectural Drawing I	20	80	100	6	DDS 205
HUM 191	Introduction to Humanities	<u>50</u>	<u>0</u>	<u>50</u>	<u>5</u>	ENG 191 w/ minimum grade of "C"
	<b>TOTAL</b>	<b>80</b>	<b>120</b>	<b>200</b>	<b>14</b>	

**SIXTH QUARTER**

DDS 203	Surveying I <b>OR</b>	10	40	50	3	DDF 107, MAT 104 or 191
DDS 204	Estimating	( 10)	( 40)	( 50)	( 3)	ENG 101 or 191, MAT 104 or 191
PSY 191	Introductory Psychology <b>OR</b>					
SOC 191	Introduction to Sociology <b>OR</b>					
ECO 191	Principles of Economics	50	0	50	5	*
PHY 190	Introductory Physics <b>OR</b>					
PHY 191	Mechanics	40	30	70	5	MAT 191 or MAT 196
XXX XXX	Elective				<u>6</u>	
	<b>TOTAL</b>	<b>100+</b>	<b>70+</b>	<b>170+</b>	<b>19</b>	

\*Approved admission level English, reading and/or mathematics competency required.

**CIP CODE: 15.130103**

**MAJOR CODE: DR03**

**REQUIRED CREDIT HOURS: 96**

**10/07**

The curriculum is subject to change to meet changing conditions. As set forth in its catalog, DeKalb Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law).

**DRAFTING PROGRAM COURSE DESCRIPTIONS**

**DDF 101 - INTRODUCTION TO DRAFTING (6)**

Emphasizes the development of fundamental drafting techniques. Topics include: safety practices, terminology, care and use of drafting equipment, lettering, line relationships, and geometric construction.

**DDF 102 - SIZE AND SHAPE DESCRIPTION I (5)**

Prerequisite/Corequisite: DDF 101

Provides multi-view and dimensioning techniques necessary to develop views that completely describe machine parts for manufacture. Topics include: multi-view drawing, basic dimensioning practices, tolerances and fits, sketching, and precision measurement.

**DDF 103 - SIZE AND SHAPE DESCRIPTION II (5)**

Prerequisite/Corequisite: DDF 102

Continues dimensioning skill development and introduces sectional views. Topics include: advanced dimensioning practices, and section views.

**DDF 105 - AUXILIARY VIEWS (3)**

Prerequisite/Corequisite: DDF 103

Introduces techniques necessary for auxiliary view drawings. Topics include: primary auxiliary views and secondary auxiliary views.

**DDF 106 - FASTENERS (6)**

Prerequisite/Corequisite: DDF 105

Provides knowledge and skills necessary to draw and specify fasteners. Topics include: utilization of technical reference sources, types of threads, representation of threads, specifying threads, fasteners, and welding symbols.

**DDF 107 - INTRODUCTION TO CAD (6)**

Prerequisites/Corequisites: DDF 102, SCT 100

Introduces basic concepts, terminology, and techniques necessary for CAD applications. Topics include: terminology, CAD commands, basic entities, basic CAD applications.

**DDF 108 - INTERSECTIONS AND DEVELOPMENT (5)**

Prerequisites/Corequisites: DDF 103; MAT 104 or 191

Introduces the graphic description of objects represented by the intersection of geometric components. Topics include: surface development, establishment of true length, and intersection of surfaces.

**DDF 109 - ASSEMBLY DRAWINGS I (5)**

Prerequisite/Corequisite: DDF 108

Provides knowledge and skills necessary to make working drawings. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

**DDF 111 - INTERMEDIATE CAD (6)**

Prerequisite/Corequisite: DDF 107

Continues developing CAD utilization skills in discipline-specific applications. Topics include: intermediate CAD commands, entity management, advanced line construction, block construction and management, command reference customization, advanced entity manipulation, and system variables.

**DEKALB TECHNICAL COLLEGE**  
*Clarkston Campus*

**DRAFTING PROGRAM COURSE DESCRIPTIONS CONT.**

**ESTIMATED PROGRAM COSTS**  
**DRAFTING**  
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**DDF 112 - 3-D DRAWING AND MODELING (6)**

Prerequisite: DDF 111  
Continues developing CAD utilization skills in discipline-specific applications. Topics include: advanced CAD commands, CAD applications, macro utilization, application utilization, 3-D modeling, rendering, advanced application utilization, and pictorial drawings.

**DDS 201 – STRENGTH OF MATERIALS (5)**

Prerequisites: ENG 101 or ENG 191, MAT 104 or MAT 191  
Provides a non-calculus based overview of the behavior of materials when subjected to different loadings and restraints and the prediction of materials behavior in different situations. Topics include: concepts of stress, concepts of strain, tension, moments of inertia, and beam bending.

**DDS 203 – SURVEYING I (3)**

Prerequisites: DDF 107, MAT 104 OR MAT 191  
Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

**DDS 204 – ESTIMATING (3)**

Prerequisites: ENG 101 or ENG 191, MAT 104 or MAT 191  
Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products. Topics include: blue print reading, material take-offs, price extension and utilization of reference sources.

**DDS 205 - RESIDENTIAL ARCHITECTURAL DRAWING I (6)**

Prerequisites: DDF 111, DDS 201, ENG 101 or ENG 191, MAT 104 or MAT 191  
Corequisite: DDF 112  
Introduces architectural drawing skills necessary to produce a complete set of construction drawings given floor plan information. Topics include: footing, foundation and floor plans; interior and exterior elevations; sections and details; window, door and finish schedules; site plans; and specifications.

**DDS 207 – MECHANICAL SYSTEMS FOR ARCHITECTURE(3)**

Prerequisites/Corequisites: DDS 205, DDS 206, PHY 221 or PHY 191  
Reinforces technical knowledge and skills required to develop accurate mechanical and electrical plans. Topics include: heating, ventilation, and air conditioning calculations and plans; electrical calculations and plans; and plumbing calculations and plans.

**DDS 208 – RESIDENTIAL ARCHITECTURAL DRAWING II (3)**

Prerequisite/Corequisite: DDS 205  
Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: footing, foundation, and floor plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; specifications; and mechanical and electrical systems.

**First Quarter**

Tuition/Fees.....	\$544.00
Books.....	240.00
Supplies.....	70.00
<b>Total.....</b>	<b>\$854.00</b>

**Second Quarter**

Tuition/Fees.....	\$544.00
Books.....	140.00
Supplies.....	120.00
<b>Total.....</b>	<b>\$834.00</b>

**Third Quarter**

Tuition/Fees.....	\$544.00
Books.....	170.00
Supplies.....	120.00
<b>Total.....</b>	<b>\$834.00</b>

**Fourth Quarter**

Tuition/Fees.....	\$544.00
Books.....	120.00
Supplies.....	120.00
<b>Total.....</b>	<b>\$784.00</b>

**Fifth Quarter**

Tuition/Fees.....	\$544.00
Books.....	50.00
Supplies.....	120.00
<b>Total.....</b>	<b>\$714.00</b>

**Sixth Quarter**

Tuition/Fees.....	\$544.00
Books.....	50.00
Supplies.....	120.00
<b>Total.....</b>	<b>\$714.00</b>

**Total Cost..... \$4,734.00**

Tuition/fees and cost of books/supplies are estimates only and are subject to change without notice. Tuition is based on Georgia residency.  
10/07