

CAD DRAFTING TECHNOLOGY

Engineering, Math and Physical Sciences Division, Room T302, (847) 543-2044 www.clcillinois.edu/programs/cad

This program prepares students for employment and advancement in Computer Aided Design (CAD). CAD Drafters work under the supervision of an engineer or designer creating drawings. With additional education and experience the graduate may advance to designer, checker, or supervisor. Drawings are produced using a variety of CAD/CAM software. Students may select a program from the following options: Mechanical, and Graphics Animation and Presentation

CAD DRAFTING TECHNOLOGY: MECHANICAL OPTION

Degree: Associate in Applied Science, CAD Drafting Technology: Mechanical Option Plan 24DC

To complete an A.A.S., students are **strongly encouraged** to meet with an Academic Success Advisor to identify coursework that will meet degree requirements.

SUMMER		4
CLC 120 ^	College Success Seminar	[2]
CAD 111 *	CAD Drafting Applications	4
FIRST SEME	STER	15
ART 124	Drawing I	3
CAD 110	CAD/CAM Concepts	3
CAD 117	Introduction to AutoCAD	3
CAD 170	Introduction to Solidworks	3
CMM 111	Communication Skills	3
SECOND SE	MESTER	18
SECOND SE ENG 120	MESTER Technical Composition I	18
ENG 120	Technical Composition I	3
ENG 120 MTH 115	Technical Composition I Applied Mathematics II	3
ENG 120 MTH 115 CAD 171	Technical Composition I Applied Mathematics II Introduction to Inventor	3 3
ENG 120 MTH 115 CAD 171 MTT 112 CAD 176	Technical Composition I Applied Mathematics II Introduction to Inventor Machining Principals	3 3 3 3
ENG 120 MTH 115 CAD 171 MTT 112 CAD 176	Technical Composition I Applied Mathematics II Introduction to Inventor Machining Principals Introduction to Creo	3 3 3 3

SUMMER		3
MET 214 *#	Mechanical Design	
	and Drafting	3
THIRD SEME	STER	12
ECO 110	Economics for Business	
	and Industry 3	
CAD 270 **#	Solidworks II	3
CAD 271 **#	Inventor II	3
CNC 218	Introduction to MasterCam	3
FOURTH SEN	MESTER	9
CAD 276 ***	Creo II	3
MET 111	Manufacturing Processes	3
CAD 217 ***	AutoCAD II	3

^ The credit for CLC 120, College Success Seminar, is an institutional requirement for graduation. It is not part of the program requirements but must be completed with a D or better.

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- * Summer only
- ** Fall only
- *** Spring only
- # Prerequisite required

Total Hours for A.A.S. Degree

CAD DRAFTING TECHNOLOGY: GRAPHICS, ANIMATION, AND PRESENTATION OPTION

Degree: Associate in Applied Science, CAD Drafting Technology: Graphics, Animation and Presentation Option Plan 24DJ

To complete an A.A.S., students are **strongly encouraged** to meet with an Academic Success Advisor to identify coursework that will meet degree requirements.

SUMMER SESSION 4			
CLC 120 ^	College Success Seminar	[2]	
CAD 111 *	CAD Drafting Application	4	
FIRST SEMES	STER	18	
ART 124	Drawing I	3	
CAD 110	CAD/CAM Concepts	3	
CAD 117	Introduction to AutoCAD	3	
CAD 170	Introduction to SolidWorks	3	
CAD 176	Introduction to Creo	3	
CMM 111	Communication Skills	3	
SECOND SEN	MESTER	15	
CAD 171	Introduction to Inventor	3	
CAD 178	Introduction to Revit	3	
ENG 120	Technical Composition	3	
MTH 115	Applied Mathematics II	3	
	Techincal Elective	3	
THIRD SEME	STER	12	
ART 222	Computer Art I	3	
ART 263 #	2D Computer Animation	3	
CAD 179	Introduction to Autodesk		
	3Ds Max	3	
CAD 278 **#	Revit II	3	
FOURTH SEM	MESTER	12	
DMD 121	Introduction to Graphic Design	1 3	
CAD 217 ***#	AutoCAD II	3	
DMD 111	Introduction to Digital Media Social Science Elective	3	
		-	

Total Hours for A.A.S. Degree

TECHNICAL ELECTIVES:

A broad choice of technical electives is available. See an advisor in the CAD department for approval of electives.

ART 263	2D Computer Animation	3
ART 264	3D Computer Animation	3
CAD 110	CAD-CAM Concepts	3
CAD 111 *	CAD Drafting Application	4
CAD 117	Introduction to AutoCAD	3
CAD 170	Introduction to SolidWorks	3
CAD 171	Introduction to Inventor	3
CAD 176	Introduction to Creo	3
CAD 177 ***	Civil Drafting #	3
CAD 178	Introduction to Revit	3
CAD 179	Introduction to Autodesk	
	3ds Max	3
CAD 211 ***	Geometric Dimension and	
	Tolerancing	3
CAD 217 ***	AutoCAD II	3
CAD 270 **	SolidWorks II	3
CAD 271 **	Inventor II	3
CAD 276 ***	Creo II	3
CAD 278 ***	Revit II	3
CAD 279 ***	Design Visualization	
	Using 3ds Max	3
CNC 218	Introduction to MasterCam	3
DMD 157	Introduction to Animation	3
EGR 140	How to Make Anything	3
ELT 111	Electronic Drafting	2
EWE 120	Job Readiness Skills	1
EWE 220	Cooperative Work	
	Experience I	2
LPO 111	Fundamentals of Light and Lasers	4
LPO 145	Photonic CAD Applications	3
MET 111	Manufacturing Processes	3
MET 112	Basic Metallurgy I	3
MET 214	Mechanical Design	
	and Drafting	3
MTH 115	Applied Mathematics II	3
MTT 111	Machine Shop I	3
MTT 112	Machining Principles	3

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CAD DRAFTING TECHNOLOGY - GRAPHICS, ANIMATION, AND PRESENTATION (Certificate) Plan 24DK

This advanced certificate is designed for the individual who possesses education or experience in computer aided design (CAD) or graphic arts. The certificate fills the gap between CAD and computer-generated art and provides the graduate with the skills to create sophisticated computer enhanced presentations for use in a variety of applications.

FIRST SEME	STER	12
CLC 120 ^	College Success Seminar	[2]
CAD 110	CAD/CAM Concepts	3
CAD 117	Introduction to AutoCAD	3
DMD 111	Introduction to Digital Media	3
	Technical Elective	3
SECOND SEI	MESTER	9
ART 222	Computer Art I	3
ART 263 #	2D Computer Animation	3
	Technical Elective	3
Total Hours for Certificate		21

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Prerequisite required
*** Spring only

Continued on next page.

^{*} Summer only

^{**} Fall only

^{***} Spring only

[#] Prerequisite required

TECHNICAL ELECTIVES:

A broad choice of technical electives is available. See an advisor in the CAD department for approval of electives.

ART 263 # ART 264 # DMD 121	2D Computer Animation 3D Computer Animation Introduction to Graphic	3
21112 121	Design	3
CAD 110	CAD-CAM Concepts	3
CAD 111 *	CAD Drafting Applications	4
CAD 117	Introduction to AutoCAD	3
CAD 170	Introduction to SolidWorks	3
CAD 171	Introduction to Inventor	3
CAD 176	Introduction to Creo	3
CAD 177 ***	Civil Drafting #	3
CAD 178	Introduction to Revit	3
CAD 179	Introduction to Autodesk 3ds Max	3
CAD 211 ***#	Geometric Dimension and	
	Tolerancing	
CAD 217 ***#	AutoCAD II	3
CAD 270 **#	SolidWorks II	3
CAD 271 **#	Inventor II	3
CAD 273	Advanced CAD	
	Specialization	1-3
CAD 276 ***#		3
CAD 278 **#	Revit II	3
CAD 279 ***	Design Visualization	_
	Using 3ds Max	3
CNC 218	Introduction to MasterCam	3
DMD 157	Introduction to Animation	3
EGR 140	How to Make Anything	3
ELT 111	Electronic Drafting	2
EWE 120 EWE 220	Job Readiness Skills	1
EWE 220	Cooperative Work Experience I	2
LPO 111	Fundamentals of Light	Z
LPO III	and Lasers	4
LPO 145	Photonic CAD Applications	3
MET 111	Manufacturing Processes	3
MET 112	Basic Metallurgy I	3
MET 214 #	Mechanical Design and Drafting	3
MTH 115	Applied Mathematics II	3
MTT 111	Machine Shop I	3
MTT 112	Machining Principles	3

^{*} Summer only

CAD DRAFTING TECHNOLOGY -ARCHITECTURAL/CIVIL (Certificate) Plan 24DN

FIRST SEME	STER	6
CLC 120 ^	College Success Seminar	[2]
CAD 110	CAD/CAM Concepts	3
CAD 117	Introduction to AutoCAD	3
SECOND SEMESTER		9
CAD 178	Introduction to Revit	3
CAD 177 ***	Civil Drafting	3
CAD 217 ***	# AutoCAD II	3
THIRD SEMESTER		3
CAD 278 **# Revit II		3
Total Hours for Certificate		18

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CAD DRAFTING TECHNOLOGY -3D PARAMETRIC (Certificate) Plan 24DP

SUMMER SI	ESSION	4
CLC 120 ^	College Success Seminar	[2]
CAD 111 *	CAD Drafting Applications	4
FIRST SEME	STER	9
CAD 170	Introduction to Solidworks	3
CAD 171	Introduction to Inventor	3
CAD 176	Introduction to Creo	3
SECOND SEI	MESTER	6
CAD 276 ***	# Creo II	3
CAD 211 ***	Geometric Dimensioning and Tolerancing	3
THIRD SEM	ESTER	6
CAD 270 **#	SolidWorks II	3
CAD 271 **#	Inventor II	3
Total Hours f	or Certificate	25

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Prerequisite required

^{**} Fall only

^{***} Spring only

[#] Prerequisite required

^{**} Fall only

^{***} Spring only # Prerequisite required

^{*} Summer only

^{**} Fall only

^{***} Spring only

CAD DRAFTING TECHNOLOGY - AUTOCAD (Certificate) Plan 24DQ		CAD DRAFTING TECHNOLOGY - CREO (Certificate) Plan 24DT	
SUMMER SESSION CAD 111 * CAD Drafting Applications	4 4	SUMMER SESSION CAD 111 * CAD Drafting Applications	4 4
FIRST SEMESTER CAD 110 CAD/CAM Concepts CAD 117 Introduction to AutoCAD	6 3 3	FIRST SEMESTER CAD 176 Introduction to CREO	3
SECOND SEMESTER CAD 217 ***# AutoCAD II	3	SECOND SEMESTER CAD 276***# CREO II CAD 211 ***# Geometric Dimension and Tolerancing	6 3
Total Hours for Certificate	13	Total Hours for Certificate	13
* Summer only *** Spring only # Prerequisite required		* Summer only *** Spring only # Prerequisite required	10
CAD DRAFTING TECHNOLOGY - SOLIDWORKS (Certificate) Plan 24DS		CAD DRAFTING TECHNOLOGY - AUTODESK INVENTOR (Certificate) Plan 24DU	
SUMMER SESSION CAD 111 * CAD Drafting Applications CAD 170 Introduction to Solidworks	7 4 3	SUMMER SESSION CAD 111 * CAD Drafting Applications	4 4
FIRST SEMESTER CAD 270 **# Solidworks II	3	FIRST SEMESTER CAD 171 Introduction to Inventor	3
SECOND SEMESTER CAD 211 ***# Geometric Dimension and Tolerancing	3	SECOND SEMESTER CAD 211 ***# Geometric Dimension and Tolerancing	3
Total Hours for Certificate	13	THIRD SEMESTER CAD 271 **# Inventor II	3
* Summer only ** Fall only *** Spring only # Prerequisite required		* Summer only ** Fall only ** Spring only # Prerequisite required For more information on recommended courses or program specific advising, contathe Engineering, Math and Physical Science division at (847) 543-2044.	13