



Architectural and Engineering Computer Aided Design Certificate Plans

Effective Fall 2011

Note: The certificate program in A&E CAD requires a minimum of 36 credit hours of which 5 courses are required (see below). Students may choose from other courses offered by the department to fill out the remaining courses. Note: Students are responsible for meeting prerequisite requirements for courses (consult the ACC course catalog). It is strongly recommended that students meet with a departmental advisor before beginning the certificate program.

STUDENT: _____

DATE: _____

ADVISOR: _____

36 CREDIT HOUR CERTIFICATE REQUIRED COURSES*		
DFTG-1405	Technical Drafting (AutoCAD)	Semester 1
DFTG-1417	Architectural Drafting – Residential (AutoCAD)	Semester 2
DFTG-2430	Civil Drafting (CIVIL 3D)	Semester 2
DFTG-1433	Mechanical Drafting (INVENTOR)	Semester 2
	Restricted Elective See lists at right->	
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DFTG-1491+	Special Topics: CAD Portfolio (ALL)	Final Semester

STUDENTS SEEKING AN AAS DEGREE WITH ARCHITECTURAL SPECIALIZATION MAY CHOOSE FROM THE RESTRICTED ELECTIVES LISTED BELOW.		
DFTG-2431	Adv. Technologies in Architectural Design and Drafting-Intro to Building Information Modeling (REVIT)	
DFTG-2428	Architectural Drafting – Commercial (REVIT Architecture)	
ARCE-1452	Structural Drafting (AutoCAD/REVIT)	
DFTG - 2400	Intermediate Architectural Drafting – Adv. Residential (REVIT)	
DFTG-2412	Technical Illustration (3DS MAX & ILLUSTRATOR)	
DFTG-2474	Architectural Modeling (AutoCAD & 3DS MAX)	

STUDENTS SEEKING AN AAS DEGREE WITH MECHANICAL SPECIALIZATION MAY CHOOSE FROM THE RESTRICTED ELECTIVES LISTED BELOW		
DFTG-1458	Electrical/Electronic Drafting (AutoCAD)	
DFTG-2402	Machine Drafting (INVENTOR)	
DFTG-2412	Technical Illustration (3DS MAX & ILLUSTRATOR)	
DFTG-2440	Solid Modeling/Design (ProE)	
DFTG-2473	Introduction to CAD/CAM (MASTERCAM)	
DFTG-1495	ST in Mech Drafting: (SOLIDWORKS)	
DFTG-1445	Parametric Modeling and Design	
DFTG-1475	Advanced Pro E Surface Modeling (ProE)	

STUDENTS SEEKING AN AAS DEGREE WITH INTERDISCIPLINARY SPECIALIZATION MAY CHOOSE FROM THE RESTRICTED ELECTIVE LISTED BELOW		
ARCE-1452	Structural Drafting (AutoCAD)	
DFTG-1445	Parametric Modeling and Design	
DFTG-1458	Electrical/Electronic Drafting (AutoCAD)	
DFTG-1475	Advanced Pro E Surface Modeling (ProE)	
DFTG-1492	ST in Arch Drafting: Advanced Residential (AutoCAD)	
DFTG-1493	ST in Advanced Civil Drafting (CIVIL 3D)	
DFTG-1494	ST in Electronic CAD: IC LAYOUT III (CADENCE)	
DFTG-1495	ST in Mech Drafting: (SOLIDWORKS)	
DFTG-1495	ST in Mech Drafting: (MEMS)	
DFTG-2402	Machine Drafting (INVENTOR)	
DFTG-2405	Printed Circuit Board Design (CADENCE ALLEGRO)	
DFTG-2412	Technical Illustration (3DS MAX & ILLUSTRATOR)	
DFTG-2419	Intermediate Computer-Aided Drafting (AutoCAD)	
DFTG-2421	Topographical Drafting (Civil 3D)	
DFTG-2428	Architectural Drafting – Commercial (REVIT Architecture)	
DFTG-2431	Adv. Technologies in Architectural Design and Drafting-Intro to Building Information Modeling (REVIT)	
DFTG-2432	Advanced Computer-Aided Drafting (AutoCAD)	
DFTG-2436	Computer-Aided Drafting Programming (AutoCAD)	
DFTG-2440	Solid Modeling/Design (ProE)	
DFTG-2470	IC Layout and Design I (CADENCE VIRTUOSO)	
DFTG-2471	IC Layout and Design II (CADENCE VIRTUOSO)	
DFTG-2473	Introduction to CAD/CAM (MASTERCAM)	
DFTG-2474	Architectural Modeling (AutoCAD&3DS MAX)	
DFTG-2475	Water & Wastewater (CIVIL 3D)	
DFTG-2476	Transportation Drafting (Microstation)	
DFTG-2477	CAD Management Essentials (AutoCAD)	
MCHN-1419	Manufacturing Materials and Process (MASTERCAM)	
ENGR-1201	Introduction to Engineering	
	Intro to Geographic Information Systems	




Notes:

All of the courses listed in the certificate plans can be applied toward the thirteen technical electives required for the Associate of Applied Science degree in the A&E CAD department.

*Principal CAD software used in course (shown in parenthesis) may be subject to change.

+Capstone Course offered via Distance Learning see department advisor for details.

Architectural and Engineering Computer Aided Specialized Certificate Plan-Effective Fall 2011

 **Architectural and Engineering Computer Aided Certificate Plan**
IC Layout Certificate-Effective Fall 2011

STUDENT: _____
DATE: _____
ADVISOR: _____

REQUIRED 'IC LAYOUT' COURSES		
DFTG-2470	IC Layout and Design I (CADENCE VIRTUOSO)	Semester 1
CETT-1403	DC Circuits	Semester 1
DFTG-2471	IC Layout and Design II (CADENCE VIRTUOSO)	Semester 2
CETT-1425	Digital Fundamentals	Semester 2
DFTG-2405	Printed Circuit Bd. Design (CADENCE ALLEGRO)	Semester 3
DFTG-1494	IC Layout and Design III (CADENCE)	Semester 3
ITSC-1307****	UNIX Operating System I	Semester 3

Notes: _____

Software used in each course is listed in parentheses

***NOTE:** There is some flexibility within certificate and degree plans. In some instances, other A&E CAD courses, or approved technical electives, may be substituted for required courses with Department Chair approval. See your A&E CAD faculty advisor for more information or to schedule an advising appointment (512) 223-4841.

All of the courses listed in the certificate plan can be applied toward the thirteen technical electives required for the Associate of Applied Science degree in the A&E CAD department.



Architectural and Engineering Computer Aided Certificate Plan Civil CAD Graphics Certificate-Effective Fall-2011

STUDENT: _____
DATE: _____
ADVISOR: _____

CIVIL BLOCK COURSES*		
DFTG-1405	Technical Drafting (AutoCAD)	Semester 1
GEOG-2470	Intro. to Geographic Information Systems (ARCVIEW)	Semester 1
DFTG-2430	Civil Drafting (Civil 3D)	Semester 2
DFTG-2421	Topographical Drafting (Civil 3D)	Semester 3

Notes: _____

Software used in each course is listed in parentheses.

**Replaces DFTG 1409 in previous A&E CAD degree plans. Students who have credit for DFTG 1409 should NOT enroll in DFTG 2419

NOTE: See A&E CAD's Civil Coordinator, Jeffrey Muhammad, for more information or contact Trang Ong to schedule an advising appointment (512) 223-4841. All of the courses listed in the certificate plan can be applied toward the thirteen technical electives required for the Associate of Applied Science degree in the A&E CAD department.



Architectural and Engineering Computer Aided Certificate Plan CAD Management Certificate-Effective Fall-2011

STUDENT: _____
DATE: _____
ADVISOR: _____

CAD MANAGEMENT BLOCK COURSES*		
DFTG-2477	CAD Management Essentials (AutoCAD)	Semester 1
DFTG-2432	Advanced CAD (AutoCAD)	Semester 2
DFTG-2436	CAD Programming	Semester 3

Notes: _____

Software used in each course is listed in parentheses.

NOTE: See A&E CAD Management Coordinator, Sam Gideon, for more information or contact Trang Ong to schedule an advising appointment (512) 223-4841. All of the courses listed in the certificate plan can be applied toward the thirteen technical electives required for the Associate of Applied Science degree in the A&E CAD department.