

PROGRAM APPROVAL APPLICATION
NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED
(This application may not exceed 3 pages)

Fill In Form

Drafting Level I Certificate

Fall-2018

Proposed Program Title

Projected Program Start Date

Fullerton College

North Orange County Community College District

College

District

Contact Information

Doug Benoit
 Voting Member

Dean Business & CIS Office
 Title

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Phone Number

Email

Goal(s) of Program (Check all that apply):

Career Technical Education (CTE)

Transfer

Other

Type of Program (Check all that apply):

Certificate of Achievement 12-17 (or 17-27 quarter) units

Certificate of Achievement 18+ semester (or 27+ quarter) units

Associate of Science Degree

Associate of Arts Degree

Reason for Approval Request (Check One):

New Program

Substantial Change

Locally Approved

Program Information

0953.00

Recommended [Taxonomy of Program \(TOP\) Code](#)

_____ Units for Major-Degree

_____ Total Units for Degree

18 Required Units-Certificate

Written Form

1. Insert the description of the program as it will appear in the catalog. (See PCAH pp. 142 and 170)

Industrial Drafting Level I Certificate PROGRAM CODE: 2C10622

The Industrial Drafting Level I certificate program prepares students to work as computer-aided drafters/designers in industry and to upgrade the skills of persons presently employed as drafters/designers. This Certificate requires a total of 18 units with a grade of "C" or better in each course

taken. At least one half of the units toward the certificate must be completed at Fullerton College. of C or better is required for each course taken.

2. Provide a brief rationale for the program.

- The Industrial Drafting Level I Certificate program is designed to introduce students to the Technical Drafting field. In the Industrial Drafting Level I certificate program students will learn basic drafting and AutoCAD skills applicable to general drafting positions.
- Drafters prepare mechanical drawings and plans used to build everything from manufactured products, machinery and aerospace products. Most drafters use Computer Aided Drafting (CAD) systems to prepare drawings. Within the mechanical drafting occupation there are a number of specialties, including: aeronautical, mechanical, automotive, structural and robotic fields. All of these require mechanical ability and visual aptitude. An ability to draw well and perform detailed work accurately and neatly is also important. In addition, drafters will be working with other professionals and customers and need to have good interpersonal skills.

3. Summarize the Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)

The three-year average supply from regional colleges is 51 per year.
 Regional annual openings for the SOC codes listed within 17-3000 group are at a minimum of 197 indicating a gap of 146 hires per year. Source: <http://coeccc.net/supply-demand/> For Orange County

EDD enrollment projection stated below.

SOC Code*	Occupational Title	Estimated Employment 2012**	Projected Employment 2022	Numeric Change 2012-2022 [1]	Percent Change 2012-2022	Annual Average Percent Change
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Orange County

17-3000	Drafters, Engineering Technicians, and Mapping Technicians	9,390	9,220	-170	-1.8%	-0.2%
17-3011	Architectural and Civil Drafters	2,040	1,970	-70	-3.4%	-0.3%
17-3012	Electrical and Electronics Drafters	320	340	20	6.3%	0.6%
17-3013	Mechanical Drafters	580	530	-50	-8.6%	-0.9%
17-3019	Drafters, All Other	220	240	20	9.1%	0.9%

California

17-3000	Drafters, Engineering Technicians, and Mapping Technicians	77,400	80,400	3,000	3.9%	0.4%
17-3011	Architectural and Civil Drafters	12,200	12,100	-100	-0.8%	-0.1%
17-3012	Electrical and Electronics Drafters	4,500	5,000	500	11.1%	1.1%
17-3013	Mechanical Drafters	4,100	3,800	-300	-7.3%	-0.7%
17-3019	Drafters, All Other	1,800	2,100	300	16.7%	1.7%

4. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (There is space for 10 listings, if you need more, please contact laocrc@rscsd.edu)

College	Program	Who You Contacted	Outcome of Contact
Cerritos College	Engineering Design	Miodrag Micic	Left voice mail
Mt. SAC	Manufacturing Technology	Jenny Wang	Left email
Saddleback College	Drafting Technology	Susan Sherod	Left email
Santa Ana College	Engineering CAD	Steve James	Left email

5. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (There is space for 20 listings, if you need more, please contact laocrc@rscsd.edu). (See PCAH pp. 143 and 171)

Courses	Course Number	Course Title	Units
Required core	DRAF 070 F	Blueprint Reading for the Metal Trades	2
Required core	DRAF 140 F	AutoCAD for Industry	2
Required core	DRAF 173 F	Geometric Dimensioning and Tolerancing	2
Required core	DRAF 171 F	Fundamentals of Drafting	2
Required core	MACH 116 F	Machine Tools	2
Required core	MACH 150 F	CNC Programming Using Mastercam	3
Required core	Or MACH 154 F	CNC Programming Using Surfcam	3
Required core	WELD 121AF	Introduction to Welding	2
Required core	ARCH 124 F	Architectural CAD I	3

6. Include any other information you would like to share.