

## Associate in Applied Science and Career Certificates

### WELDING

Engineering, Math and Physical Sciences Division  
Room T102, (847) 543-2044

#### WELDING (Certificate) Plan 24WL

This certificate program and the specialty certificates prepare the student for employment and advancement in welding and welding related occupations. Advanced standing in the program can be arranged for experienced welders.

MET 112	Basic Metallurgy .....	3
MET 113	Basic Metallurgy II <i>or</i>	
MET 111	Manufacturing Processes .....	3
MTH 114	Applied Mathematics I .....	3
WLD 113	Welding Blueprint Reading .....	3
WLD 117	Applied Fabricating and Processing.....	3
WLD 170	General Welding .....	2
WLD 171	Gas Welding, Cutting and Brazing.....	3
WLD 172	Shielded Metal Arc Welding .....	3
WLD 174	Advanced Shielded Metal Arc Welding .....	3
WLD 175	Gas Metal Arc Welding .....	3
WLD 176	Welding Certification .....	1-3
WLD 178	Gas Tungsten Arc Welding.....	3
	Technical Elective* .....	2-3

**Total Hours for Certificate .....35-38**

#### Welding Electives

Select 2-3 hours from the list below with advisor approval:

CAD 110	CAD/CAM Concepts .....	3
EET 170	DC Circuit Fundamentals.....	2
EGR 121	Engineering Graphics .....	3
ELC 172	Applied AC Circuit Theory .....	2
EWE 220	Cooperative Work Experience I .....	3
MTT 111	Machine Shop I .....	3
ROB 111	Introduction to Robotics.....	3

The following three specialty certificates allow students to attain proficiency to meet more specific job requirements or career objectives in welding and welding related occupations.

#### GAS TUNGSTEN ARC WELDING (Certificate) Plan 24WM

MTH 114	Applied Mathematics I .....	3
WLD 113	Welding Blueprint Reading .....	3
WLD 117	Applied Fabricating and Processing.....	3
WLD 170	General Welding .....	2
WLD 171	Gas Welding, Cutting and Brazing.....	3
WLD 176	Welding Certification .....	1-3
WLD 178	Gas Tungsten Arc Welding.....	3

**Total Hours for Certificate .....18-20**

#### GAS METAL ARC WELDING (SPECIALTY CERTIFICATE)

##### Plan 24WN

MTH 114	Applied Mathematics I .....	3
WLD 113	Welding Blueprint Reading .....	3
WLD 117	Applied Fabricating and Processing.....	3
WLD 170	General Welding .....	2
WLD 175	Gas Metal Arc Welding .....	3
WLD 176	Welding Certification .....	1-3

**Total Hours for Certificate .....15-17**

#### SHIELDED METAL ARC WELDING (Certificate) Plan 24WO

MTH 114	Applied Mathematics I .....	3
WLD 113	Welding Blueprint Reading .....	3
WLD 117	Applied Fabricating and Processing.....	3
WLD 170	General Welding .....	2
WLD 172	Shielded Metal Arc Welding .....	3
WLD 174	Advanced Shielded Metal Arc Welding .....	3
WLD 176	Welding Certification .....	1-3

**Total Hours for Certificate .....18-20**

For more information on recommended courses or program specific advising, contact faculty member Randall Roettger or the Engineering, Math and Physical Science division at (847) 543-2044.