Solar Technologies, A.A.S.

The future of US energy prosperity rests on developing a portfolio of technologies and practices that can address America's energy needs--technologies that increase and diversify domestic energy supply, while having little or no effect on the environment. To that end the Solar Technologies AAS is structured to train professional designers, technicians and installers in a full spectrum of solar hardware, software, and best practices. The degree program targets those who see the AAS as a terminal degree and will enter the market prepared to design and install state of the art solar energy systems. The program is also adaptable to the needs of a student who is considering a four year degree option in technology or engineering. Students will prepare to sit for the North American Board of Certified Energy Practitioners (NABCEP), Entry Level Solar Thermal and Entry Level Solar Photovoltaic (PV) Installer exams.

Additionally the program will provide opportunities for the participants to gain necessary field experience for full NABCEP Solar Thermal and PV Installer Certification.

(Major Code 2190; State CIP Code 15.0505)

- Solar Technology (http://www.jccc.edu/solar-technology)

Associate of Applied Science

First Semester

ELTE 122	National Electrical Code I	4
ELTE 125	Residential Wiring Methods*	4
ELTE 123	Electromechanical Systems	4
CET 150	Construction Safety	3
or INDT 125	Industrial Safety/OSHA 30	
INDT 155	Workplace Skills	1
Total Hours		16

Second Semester

HPER 200	First Aid and CPR	2
ENGL 121	Composition I*	3
EPRM 120	Introduction to Residential Energy	3
EPRM 142	Solar Thermal Systems	3
HVAC 125	Energy Alternatives	2
MATH 130	Technical Mathematics I*	3
Total Hours		16

Third Semester

DRAF 129	Interpreting Architectural Drawings	2
EPRM 252	Solar Electric Systems*	3
EPRM 256	Solar Electric Systems Lab*	1
ELTE 210	Code Certification Review*	3
ELTE 271	Electrical Internship I*	3
Social Science and/or Economics Elective ^		3
Total Hours		15

^   Social Science and/or Economics Elective (http://catalog.jccc.edu/fall/degreecertificates/electives/social-sci-econ-aas)

Fourth Semester

Technical Electives (see below)		5
ELTE 202	Electrical Estimating*	3
ENGL 123	Technical Writing I*	3
CET 105	Construction Methods	3

Humanities Elective ^		3
Total Hours		17

^   Humanities Elective (http://catalog.jccc.edu/fall/degreecertificates/electives/humanities-aas)

Technical Electives

BUS 140	Principles of Supervision	3
BUS 145	Small Business Management	3
CET 150	Construction Safety	3
CPCA 128	PC Applications: MS Office	3
DRAF 130	Introduction to CAD Concepts - AutoCAD*	3
DRAF 250	Electrical Drafting*	3
ELEC 120	Introduction to Electronics	3
ELEC 125	Digital Electronics I	4
ELEC 131	Introduction to Sensors and Actuators	3
ELEC 133	Programmable Controllers	3
ELEC 165	Advanced Programmable Controllers*	3
ELEC 185	LAN Cabling and Installation	3
ELTE 200	Commercial Wiring Methods*	4
ELTE 215	Generators, Transformers and Motors*	4
ENTR 142	Fast Trac Business Plan	3
HVAC 121	Basic Principles of HVAC*	4
INDT 125	Industrial Safety/OSHA 30	3

Total Program Hours: 64