

## **SUSTAINABLE CONSTRUCTION & ENERGY TECHNOLOGY – RENEWABLE ENERGY CERTIFICATE OF ACHIEVEMENT**

This certificate combines competencies in sustainability, renewable energy technical skills, and entrepreneurial business. The combination of these competencies prepares students for emerging opportunities in the rapidly expanding renewable energy sector. Students completing this certificate will be well positioned to gain employment or start a business in fields such as photovoltaic design and installation and solar hot water installation.

<b>Required Courses:</b>		<b>Units</b>
BUS 174	Introduction to Green Business Principles and Practices	3
CED 196	Occupational Work Experience Education	1 - 8
CSC 104	Computers and Computer Applications	3
SCT 162	Safety Standards for Construction	1
SCT 164	Construction Documents I - Understanding Blueprints	3
SCT 166	Introduction to Construction Management	2
SCT 172	Introduction to CleanTech	3
SCT 186	Introduction to Residential Electrical Systems	3
SCT 190	Introduction to Photovoltaics (Solar)	3
SCT 192	Residential Solar Thermal (Hot Water)	3
SCT 200	Sustainability Overview	3
<b>Business Electives (minimum of 1)</b>		<b>Units</b>
BUS 108	Computerized Accounting	3
BUS 132	Entrepreneurial Management	3
BUS 176	The New Green Economy: Trends and Opportunities	3
BUS 230	Introduction to Business	3
<b>Renewable Energy Electives (minimum of 1):</b>		<b>Units</b>
SCT 180A	Construction Fundamentals and Green Building	3
SCT 184	Construction Documents II: Building to Code and Beyond	2
SCT 189	Introduction to Plumbing	3
SCT 193	Building Performance and Weatherization	3
<b>Total units required for Certificate</b>		<b>33 – 41</b>

### *Program Level Student Learning Outcomes:*

1. Students completing this certificate will be able to define concepts and principles of sustainability and explain their relation to the technical trades and related business and career opportunities.
2. Students completing this certificate will be able to apply business skills and principles to employment and entrepreneurial opportunities relating to their chosen certificate focus area.
3. Students completing this certificate will be able to demonstrate applied technical ability in their chosen certificate focus area.