



## COMPUTER AIDED DRAFTING & DESIGN COURSE

(Solidworks I (3D CAD Fundamentals))

**Admission Requirement:** GED, High School Diploma

**Course Level:** Below College level

This Entry-level Fundamentals Computer Aided Drafting (CAD) course is aimed at upgrading the skills of individuals with directed hands on instruction utilizing SolidWorks software for the creation of 3-D solid models. Through lectures and lab-based scenarios a student will work on real world projects that will progress skills. The student will begin with basic / rudimentary CAD modelling tasks and gradually advance to more complex challenges. The course provides the student with strategies and design approaches to develop proficiency in 3-D modelling abilities.

**Syllabus: Contact Hours Total: 120 Hours**

**Course will be taught in Class Room #2**

### PROGRAMS MODULES AS CURRICULUM

Course will be taught by 1 certified instructor.

- Learn the basic menu structure and graphical user interface used within SolidWorks.
- Achieve competency in creation of basic sketches.
- Apply dimensions and constraints to sketches.
- Gain competency in extruding and revolving basic 2-D geometry.
- Create features such as holes, fillets and chamfers.
- Create and modify solid parts & solid assemblies.
- Using SolidWorks software students will construct geometry and add dimensions
- create a sketch and use feature tools to build the solid models.
- Modify solid model mechanical parts.
- Modify solid model assemblies derived from solid model parts.
- Industry Specific Job Search Strategies and Training
- Job Preparation Workshops  
(*Interviewing/Resume Writing*)