ACCREDITATION

PROFESSIONAL TECHNICAL

PROGRAM OUTCOMES

Computer Aided Drafting and Design Technology

Computer Aided Drafting Mechanical Concentration Certificate  (73 credits?)
1. Communicate effectively with written, oral, and visual means (SLO 1.2)
2. Apply mathematical and scientific problem solving techniques to resolve mechanical and spatial geometry related problems (SLO 2.1, 5.1)
3. Demonstrate proficiency in CAD skills by creating complex 2-D drawings, using 3-D solid-modeling techniques, manipulating analytic and nonanalytic surfaces, and analyzing drawing data.(SLO 2.3)
4. Work productively as an individual and as a team member of a problem solving team in an engineering environment. (SLO 3)
5. Think critically and use creativity in the design of mechanical components and systems. (SLO 4.1)
6. Demonstrate knowledge, techniques, skills, and use of the appropriate tool in mechanical design applications. (SLO 5)
7. Recognize the need to stay current in the mechanical design career field. (SLO 6.1)
8. Demonstrate professional and ethical behavior. (SLO 6.3)
9. Recognize problems in mechanical design applications and develop appropriate solutions. (SLO 6.2,3)
10. Access, analyze, interpret and evaluate information from a variety of sources as Machinery Handbook, Catalogs and Internet etc.. (SLO 7)

Computer Aided Drafting and Design Technology (AAS, AAS-T)
1. Use effective communication skills as a team member to research data and generate technical documentation. (SLO 1.1, 1.2)
2. Apply knowledge related academic skills as mathematics and scientific principles to resolve technical engineering / drafting problems. (SLO 2.1, 5.1)
3. Demonstrate proficiency in CAD skills by creating complex 2-D drawings using 3-D wire-frame and 3-D solid-modeling techniques, manipulating analytic and nonanalytic surfaces, and analyzing drawing data.(SLO 2.3)
4. Apply knowledge of CADDS technology and engineering design process to solve engineering design projects. (SLO 2.2 )
5. Understand and function on diverse, multi-disciplinary teams. (SLO 3.1)
6. Demonstrate the ability to identify, think critically, formulate, and present creative solutions in the design projects. (SLO 4.1)
7. Use modern technical engineering techniques, skills, and technology including computing tools necessary for technical engineering/drafting practice. (SLO 5)
8. Recognize the need for life-long learning and adapt to change (SLO 6.1)
9. Function as an effective member of a multi-disciplinary team while committing to the quality of results and time management of assignments or design project execution. (SLO 6.2,3)
10. Understand the professional and ethical responsibility (SLO 6.5)
11. Access, and extrapolate information, data and specifications from technical resources and standards for application on drawings, projects and reports, (SLO 5, 7.1)
12. Collaborate and cooperate in a team setting to enhance cognitive and social learning by sharing in a CAD engineering environment. (SLO 3.2, 7.2)