1. *Course number and name*

**Engr 291: Introduction to CreoParametric**

1. *Credits and course contact hours*

1 Credit Hour; 55 minutes/week

1. *Instructor’s or course coordinator’s name*

Prof. Dipendra K. Sinha

1. *Text book*

CREO Parametric 9.0 Tutorial by Roger Toogood, ISBN 13: 978-1630575311

SDC Publications,2022

1. *Specific Course Information*
2. *Brief description of the content of the course*

Course is designed to provide optional skill in use of a well-recognized commercial Geometric Modeling software.

1. *Prerequisites or co-requisites*

Sophomore status

1. *Indicate whether a required, elective, or selected elective course in the program*

Elective for Mechanical Engineering

1. *Specific goals for the course*
2. *Specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic*.

* Student can use CREO Parametric to develop general 3D models
* Student can use CREO Parametric to develop create revolves
* Student can use CREO Parametric to develop create extrude holes
* Student can use CREO Parametric to develop create shells
* Student can use CREO Parametric to develop create drafts and ribs
* Student understands common engineering practice in terms of labeling and making notes on CAD drawings
* Student can use CAM systems with the 3D modeling software

b. *explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course*. ABET student outcomes: 2, 3, 7.

1. *Brief list of topics to be covered.*

CREO Basic Parametric Modeling Process, Parametric concepts and Interface, Creating Sketch for Features , Solid Modeling Concepts, Feature Based Modeling Concepts, Associative Concepts, Model Centric Concepts , Creating Revolves, Extrude Holes, Shells, Drafts and Ribs.