

# INGE 5037

**Course Title** APPLIED SIGNAL PROCESSING FOR ENGINEERING MECHANICS

**Course Description** Practical introduction to signal processing, including time-domain, frequency-domain, and time-frequency domain approaches. Students will gain the required skills to manipulate, analyze, and extract useful and reliable information from different types of signals. Practical applications of the learned methods and principles include: signal de-noising, outlier analysis, vibration based system identification, irregularities detection, system health monitoring and non-stationary signals characterization.

**Credit Hours** 3

**Course Options**

Exchange.....	No
Special Topic.....	No
Type.....	Normal
Offering Semester.....	Always
Students can take this course multiple times.....	No

**Grading Schema** Passing Grade D

**Requisites** INGE 3016 and MATE 3063

Course Syllabus