

## **General MSE Engineering Project Management Area**

### **Suggested Courses**

ME 597/ECE 595- Engineering Project Management

ME 597/ECE595- Advanced Engineering Economics

ME 597/ECE595- Statistical Concepts in Engineering

IE 530\*- Quality Control (Prerequisite: basic statistics)

IE 545\*-Engineering Economic Analysis

IE 546\*- Economic Decisions in Engineering (Prerequisite: basic probability)

IE 533\*- Industrial Application of Statistics

IE 590R\*- Manufacturing Economics

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. Masoud Mojtahed \*\*, Dr. Yeow Siow

## **Automatic Control Graduate Area**

### **Suggested Courses**

ECE 569- Introduction to Robotics

ECE 595- Estimation, Identification, and Control

ECE 595- MATLAB

ECE 595- Neural Network

ME 578\*-Digital Control

ME 575\*-Theory and Design of Control

ECE 600\*- Random Variables and Signals

ECE 602\*-Lumped System Theory (W. Lafayette campus core)

### **Math Courses**

MA 511\* or MA 554-Linear Algebra with Applications

ME 597-Numerical Methods

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. Nasser Houshangi\*\*, Dr. Donald Gray

## **Combustion Graduate Area**

### **Suggested Courses**

ME 525- Combustion

ME 597-Numerical Heat & Mass Transfer

ME 597- Combustion Fluid Dynamics

ME 510\*- Gas Dynamics

ME 500\*-Advanced Thermodynamics

ME 505\*-Intermediate Heat Transfer

ME 509\*-Intermediate Fluid Mechanics

### **Math Courses**

ME 597-Numerical Methods in Engineering

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. Chenn Zhou\*\*, Dr. Yeow Siow, Dr. Xiuling Wang

## **Design Graduate Area**

### **Suggested Courses**

ME 597- Fatigue Analysis

ME 597-Material Selection in Design

ME 597-Finite Element Analysis

ECE 569-Introduction to Robotics

ME 553\*-Product and Process Design

ME 557\*- Design for Manufacturability

ME 571\*- Reliability Based Design

### **Math Courses**

ME 597-Numerical Methods for Engineers

STAT 514\*-Design of Experiments

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. Bipin Pai\*\*, Dr. Yulian Kin, Dr. Harvey Abramowitz

## **Environmental Control Graduate Area**

### **Suggested Courses**

ME 597- HVAC  
ME 597-Air Quality Modeling  
ME 597- Solid Waste Management  
ME 597- Water Quality  
ME 597- Watershed Management  
ME 597- Air Pollution Control  
ME 513\*-Engineering Acoustics  
ME 560\*-Mechanical Vibrations  
ME 640\*-Structural Acoustics

### **Math Courses**

ME 597-Numerical Methods

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. George Nnanna, Dr. Xiuling Wang, Dr. Chenn Zhou, Dr. Harvey Abramowitz\*\*

## **Thermal Fluids Graduate Area**

### **Suggested Courses**

ME 597- Computational Fluid Dynamics or ME 614\*-Computational Fluid Dynamics

ME 597- Heat Transfer in Electronics

ME 597- Micro-scale Heat Transfer

ME 597-Numerical Heat & Mass Transfer

ME 500\*- Advanced Thermodynamics

ME 505\*-Intermediate Heat Transfer

ME 509\*-Intermediate Fluid Mechanics

ME 597\*-Spray Theory and Applications

### **Math Courses**

ME 597-Numerical Methods for Engineers

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. George Nnanna\*\*, Dr. Xiuling Wang, Dr. Chenn Zhou, Dr. Harvey Abramowitz,  
Dr. Yeow Siow

## **Theoretical and Applied Mechanics Graduate Area**

### **Suggested Courses**

ME 597-Finite Element Analysis

Me 597- Fatigue Analysis

ME 559\*-Micromechanics of Materials

ME 560\*-Kinematics

ME 577\*-Human Motion Kinetics

### **Math Courses**

ME 597-Numerical Methods for Engineers

\*denotes distance courses by Purdue University- Engineering Professional Education

Faculty: Dr. Bipin Pai\*\*, Dr. Masoud Mojtahed, Dr. Yulian Kin