Engineering Design II

Lecture 4. Engineering Design

Engineering Design

- Introduction
- Process of Planning and Designing
- Methods for Creating and Evaluating Solutions
- Finalizing the Task and Product Planning
- Conceptual Design
- Embodiment Design

Introduction

Introduction

- The scope of design
- The necessity for systematic Design
- Project proposal preparation
- Project management

Process of Planning and Designing

- Process of Planning and Designing
 - General problem-solving process
 - Flow of work during the planning process
 - Flow of work during the designing process

Methods for Creating and Evaluating Solutions

Methods for Creating and Evaluating Solutions

- Solution finding methods
- Selection methods
- Evaluation methods

Finalizing the Task and Product Planning

Finalizing the Task and Product Planning

- Product planning
- Classifying the task

Conceptual Design

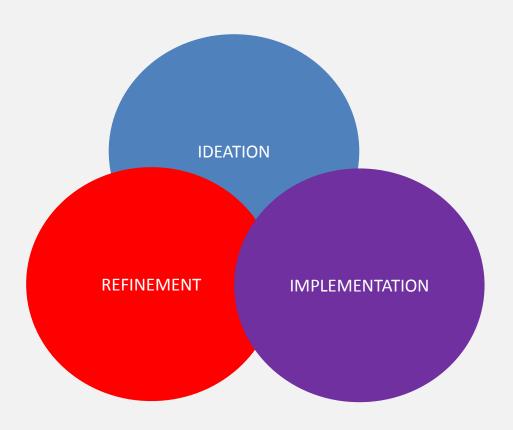
Conceptual Design

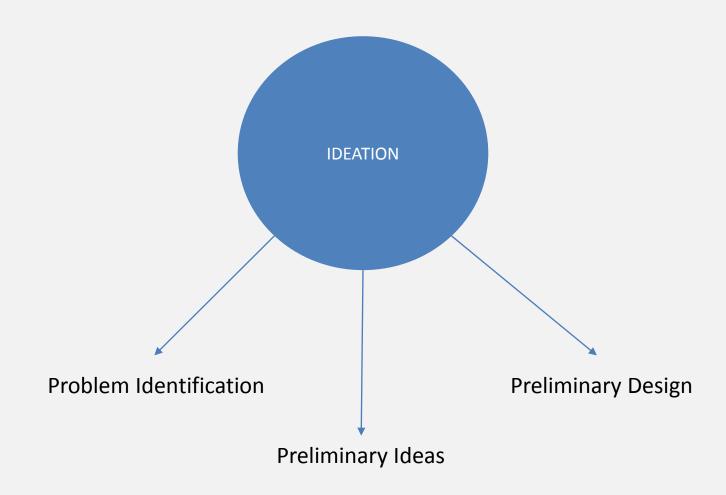
- Steps of conceptual design
- Finding essential problems by abstracting
- Establishing structures of functions
- Concept development

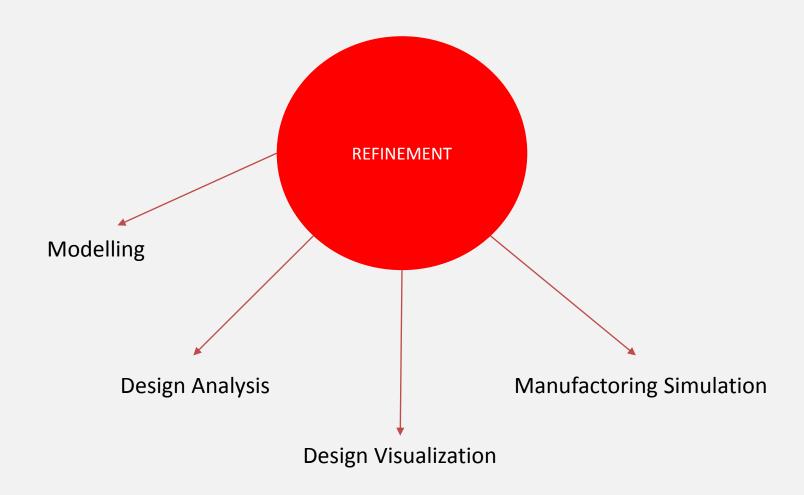
Embodiment Design

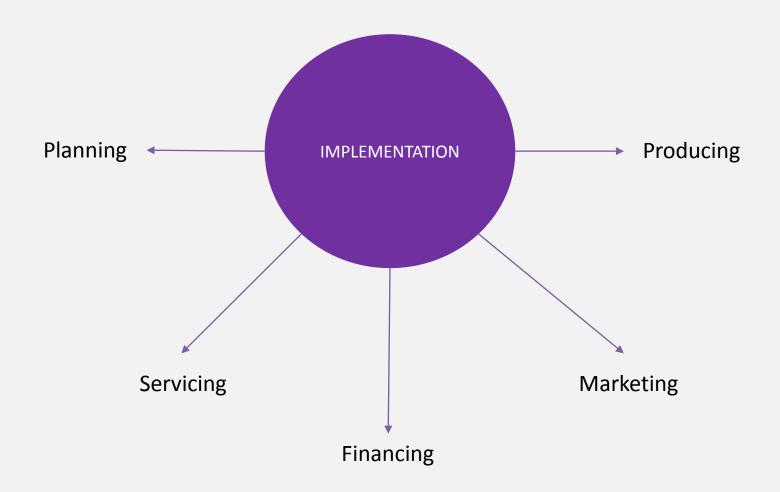
Embodiment Design

- Steps of embodiment design
- Checklist for embodiment design
- Rules of embodiment design









Questions?