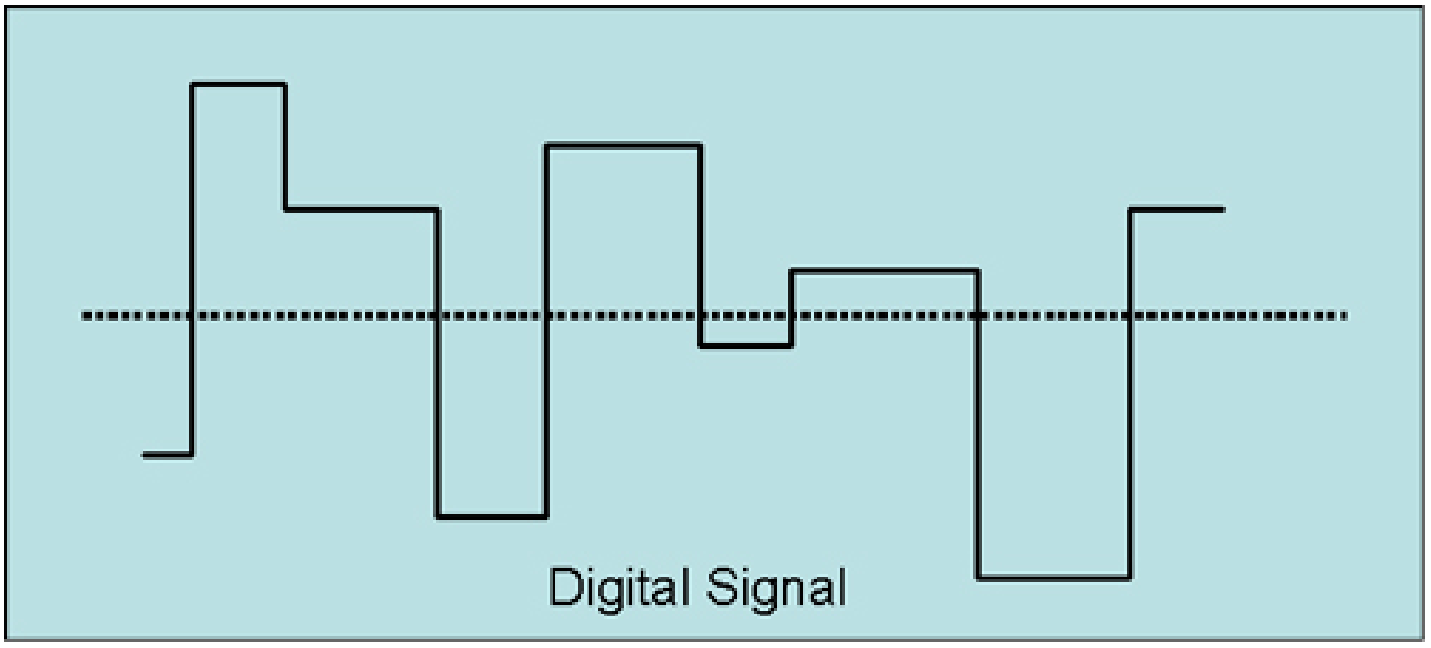
Courses

QEEE Regular | Faculty Training

Registration Steps (registration.php) Event Calendar (timetable.php)

Regular Core Engineering Topics for Students



Digital Signaling for Fading Channels - Wireless Communication

Digital Signaling for Fading Channels - Wireless Communication

Start Date	**: 07/02/2018 10:00:00**
End Date	**: 01/03/2018 12:00:00**

Topic Outline

Outline of topics:

1. Basics of Fading Channels

• Small and Large Scale fading

• Delay spread and Doppler spread

• Time selective and Frequency selective channels

• Rayleigh and Rician fading

• Communication in fading channels

• Error Performance in fading channels

2. Basics of OFDM

• Frequency selective channels and Equalization

• OFDM concept

• OFDM spectrum

• OFDM implementation

• OFDM efficiency

3. Diversity Techniques for Fading Channels

• Concept of diversity

• Time, Frequency and Spatial diversity

• Error performance with diversity

• Introduction to MIMO

Prerequisites:

• Basics of Digital Communication, PSK and QAM constellations, Probability of Error analysis in AWGN

Session Schedule

Name	Start	End
Session 1	07/02/2018 10:00:00	07/02/2018 12:00:00
Session 2	08/02/2018 10:00:00	08/02/2018 12:00:00
Session 3	09/02/2018 10:00:00	09/02/2018 12:00:00

Quiz

Assignment

Delivered by

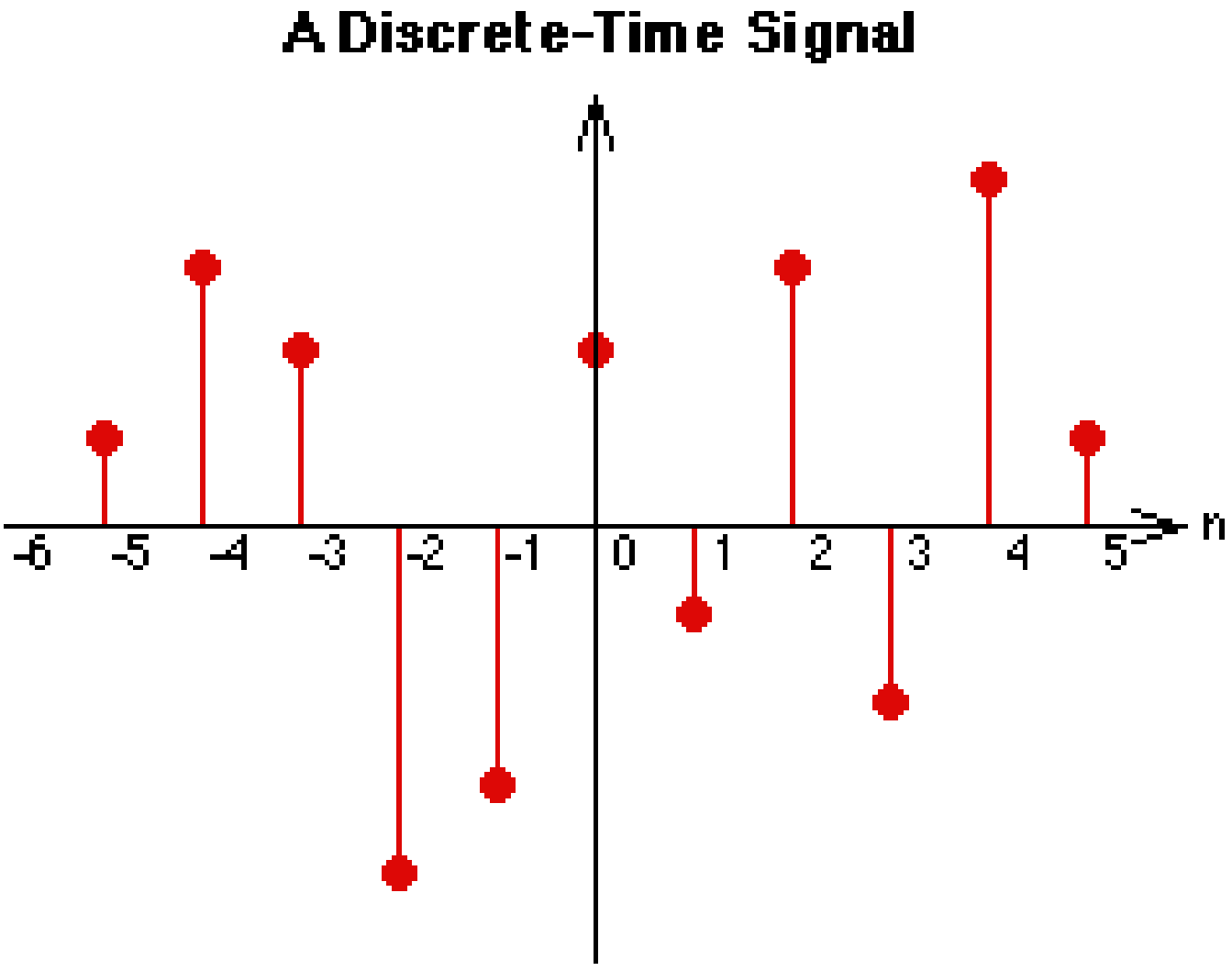
Prof. Arun Pachai Kannu (http://www.ee.iitm.ac.in/~arunpachai/)
IIT Madras

Courses

QEEE Regular | Faculty Training

Registration Steps (registration.php) Event Calendar (timetable.php)

Regular Core Engineering Topics for Students



Discrete Time Signals - Digital Signal Processing

Discrete Time Signals - Digital Signal Processing

Start Date	: 30/08/2017 23:59:59
End Date	:

Topic Outline

Relevant Dept – EE, CSE

(Any student who has completed UG level DSP)

Relevant Semester – 6, 7, or 8

Pre-requisites to attend this topic – Digital Signal Processing (DSP)

Unit 1 (6 hours)

INTRODUCTION

- Periodic Sampling (2 hours)
  - Frequency domain representation of sampling
  - Nyquist criterion, oversampling, aliasing
- Reconstruction (1 hour)
- Discrete-time processing of continuous time signals (1 hour)
- Up-sampling, and interpolation (2 hours)
  - Sampling rate change by integer value

Unit 2 (6 hours)

- Down-sampling, Nyquist criterion, Aliasing (2.5 hours)
- Fractional sampling rate change (0.5 hours)
- Interconnection of Multirate blocks (1hour)
- Fundamentals of Multi-rate Systems (2 hours)
  - Polyphase decomposition, Noble Identities

Text books

1 Discrete-Time Signal Processing by Alan V. Oppenheim, Ronald W. Schafer, 3rd edition, 2016, Pearson, ISBN 978-93-325-3503-9

Reference

1 P. Vaidyanathan, "Multirate Systems and Filter Banks," Pearson, 2004, ISBN 81-297-0685-7

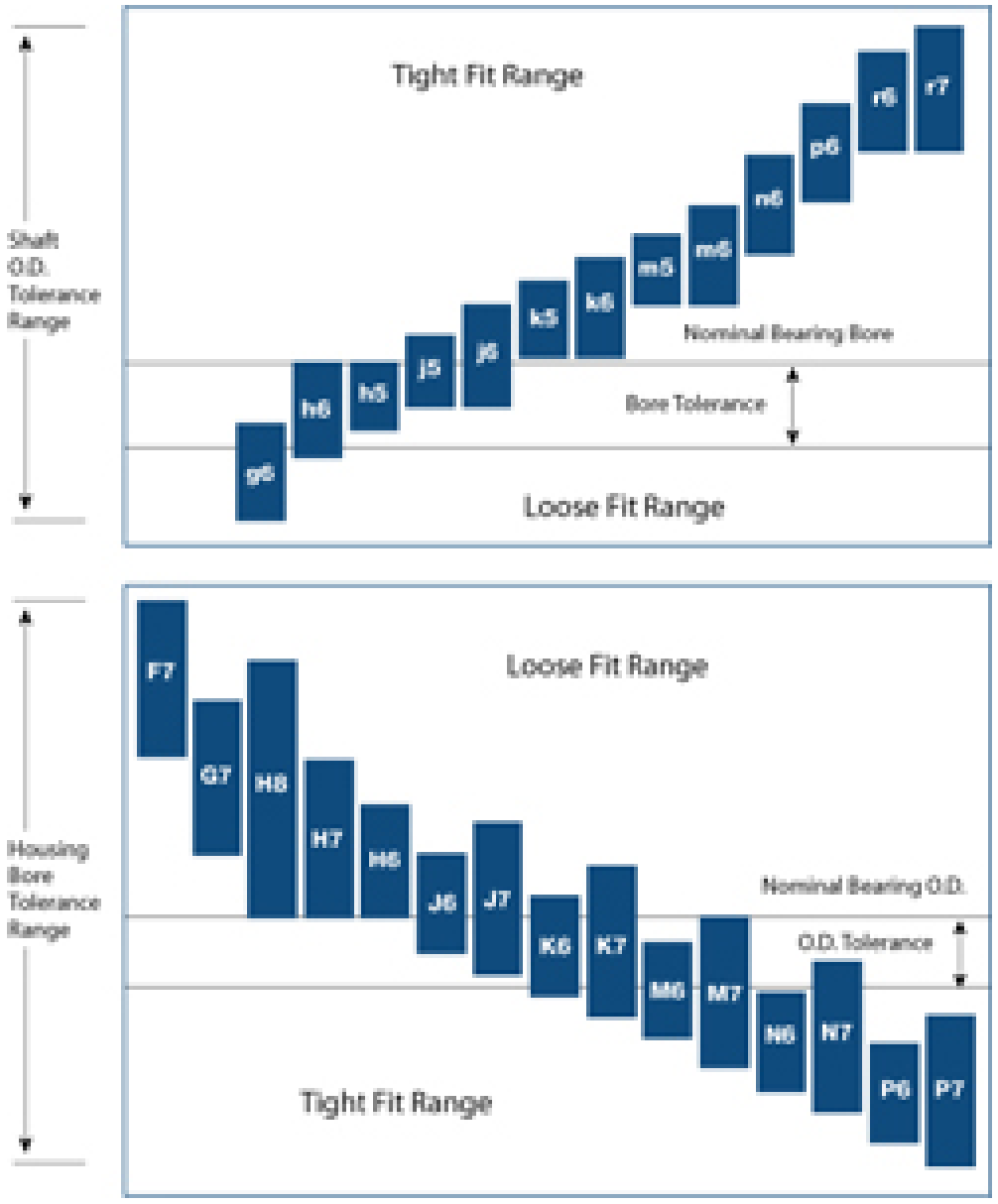
Session Schedule

Quiz

Assignment

Delivered by

Prof. David Koilpillai (https://www.iitm.ac.in/info/fac/davidk)
IIT Madras



Fits and Tolerance - Computer Aided Machine Drawing

Fits and Tolerance - Computer Aided Machine Drawing

Start Date	**: 27/02/2018 10:00:00**
End Date	**: 21/03/2018 12:00:00**

Topic Outline

Relevant Department : Mechanical Engineering

Relevant semester: Jan-June

Pre requisite: Nil

Course Description & Outline:

Limits fits and Tolerances: Standards of Measurement; systems of limits, fits and tolerances; Tolerance Control; Selection of tolerance grades; Gauging- GO and NO Gauges; Numerical problem

Session Schedule

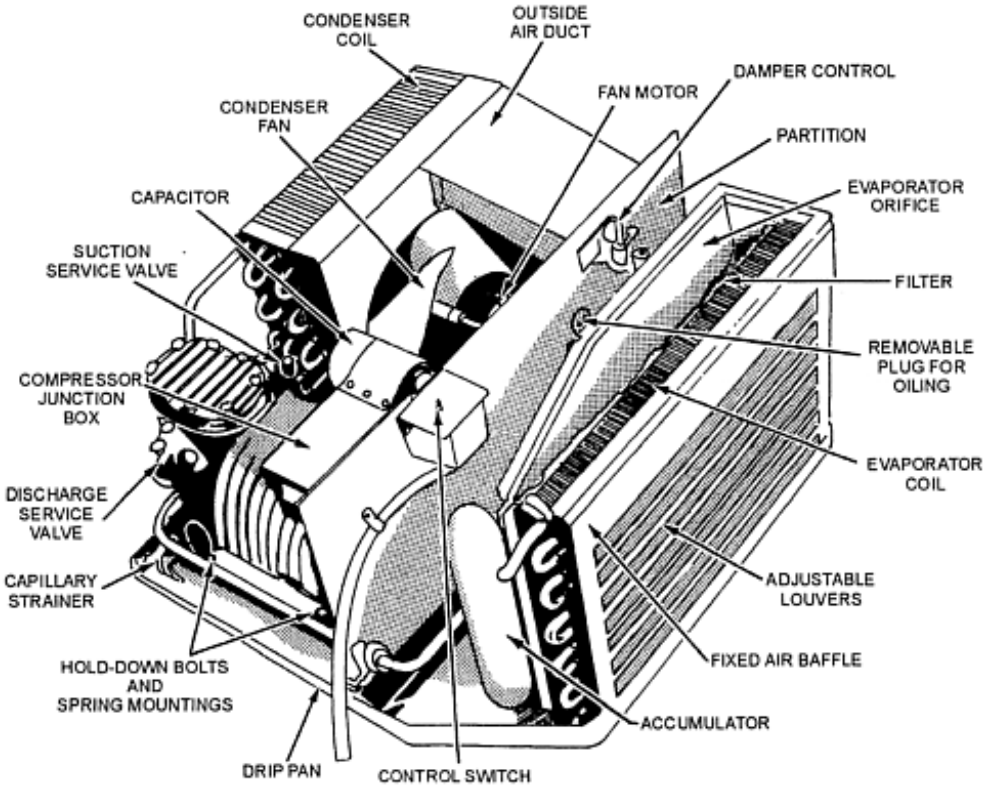
Name	Start	End
Session 1	27/02/2018 10:00:00	27/02/2018 12:00:00
Session 2	28/02/2018 10:00:00	28/02/2018 12:00:00
Session 3	01/03/2018 10:00:00	01/03/2018 12:00:00

Quiz

Assignment

Delivered by

Prof. Samuel GL IIT Madras



Fundamentals of Air - Conditioning - Thermal Engineering - 2

Fundamentals of Air - Conditioning - Thermal Engineering - 2

Start Date	**: 19/02/2018 14:00:00**
End Date	**: 19/03/2018 16:00:00**

Topic Outline

1.Relevant Semester: 6^{th} or 7^{th} Semester

2. Relevant departments: 1. Mechanical, 2. Energy, and 3. Architecture

3. Pre-requisites: Basic understanding of 1) Engineering Thermodynamics, 2) Fluid Mechanics, and 3) Heat Transfer

Course Outline

The course covers all the basic aspects of air conditioning starting with introduction and applications of air conditioning, introduction to psychrometry and psychrometric processes, introduction to human thermal comfort and comfort standards, cooling load calculations, air conditioning systems and system selection criteria and introduction to air transmission and air distribution inside the conditioned space. Sources where more information and data can be obtained along with details of some popular building simulation and load calculation software will be provided. It is expected that at the end of the course, the student is

able to select a suitable air conditioning system based on design inputs and perform simple energy consumption calculations.

Session Schedule

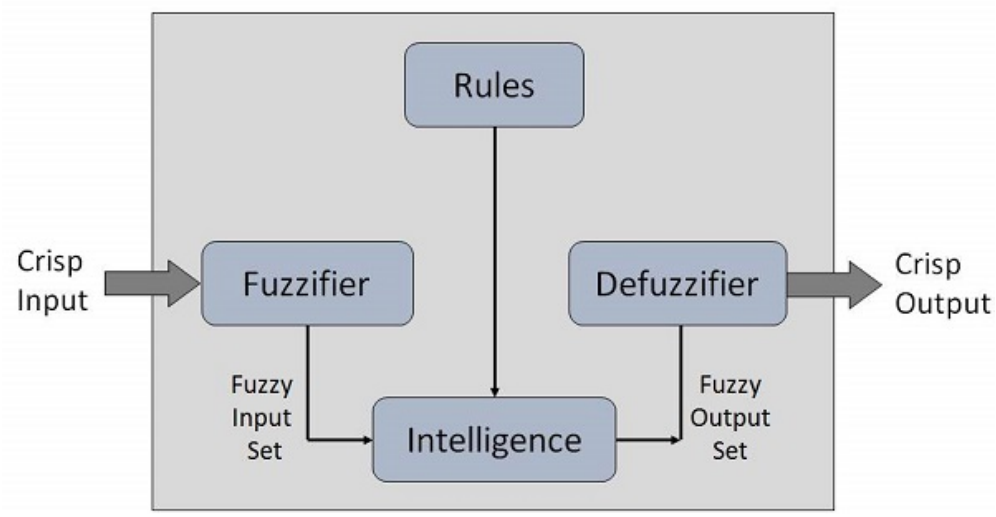
Name	Start	End
Session 1	19/02/2018 14:00:00	19/02/2018 16:00:00
Session 2	20/02/2018 14:00:00	20/02/2018 16:00:00
Session 3	27/02/2018 14:00:00	27/02/2018 16:00:00

Quiz

Assignment

Delivered by

Prof. Ramgopal M IIT Kharagpur



Fuzzy Logic System - AI Applications to Power Systems

Fuzzy Logic System - AI Applications to Power Systems

Start Date	**: 07/03/2018 10:00:00**
End Date	**: 05/04/2018 16:00:00**

Topic Outline

1. **Basics of Fuzzy Theory:**

Crisp and Fuzzy Sets, Operations, alpha- cuts,

2. **Fuzzy Relations:**

Basic Properties of Fuzzy relations and fuzzy Reasoning

3. **Fuzzy Regression Models:**

Linear Possibility Systems

4. **Fuzzy Decision Making:**

Feedback Extension and Intension

5. **Fuzzy Mathematical Programming**

Fuzzy Linear Programming

6. **Fuzzy Optimization**

Multi Factorial evaluation, multi factorial decision making

7. **Applications of Fuzzy Systems**

Diagnosis, Control, Decision Making, Information retrieval

Power Systems Examples: Fuzzy Load Flow, Fuzzy Logic Power Systems Stabilizer,

Fuzzy Optimization, Uncertainty Handling.

References:

1. Toshiro Terano, Kiyoji Asai, Michio Sugeno, “Fuzzy Systems Theory and its Applications”, Academic Press, 1995.
2. Hong Xing Li and Vincent C. Yen “Fuzzy Sets and Fuzzy Decision Making”, CRC Press 1995
3. El-Hawary “Electric Power Applications of Fuzzy Systems”, , IEEE Press,1998

Session Schedule

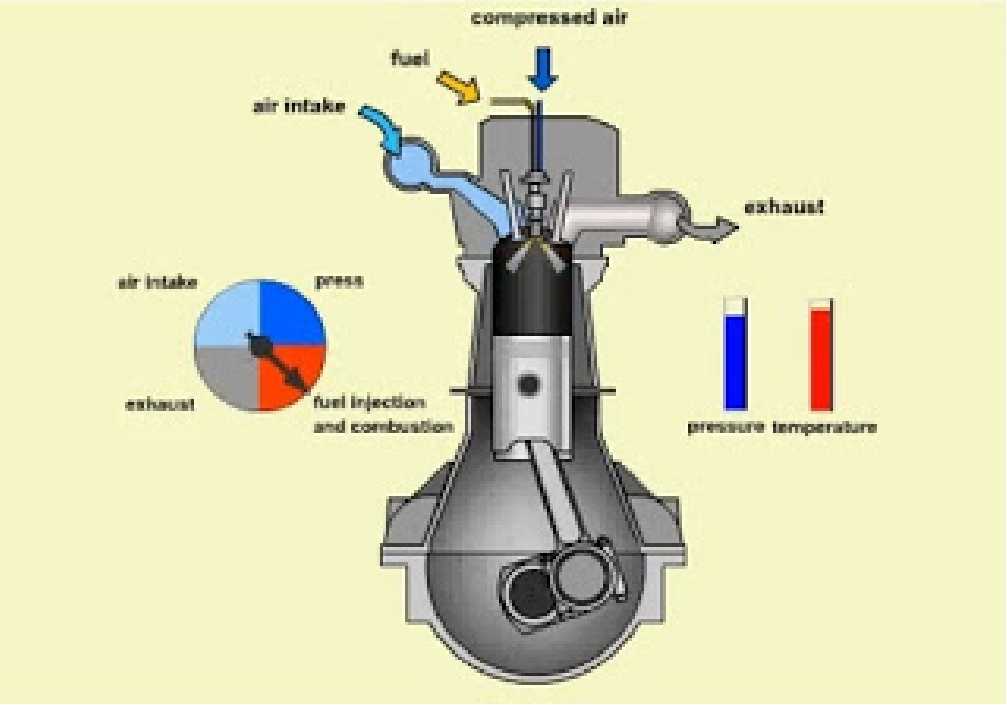
Name	Start	End
Session 1	07/03/2018 10:00:00	07/03/2018 12:00:00
Session 2	09/03/2018 14:00:00	09/03/2018 16:00:00
Session 3	16/03/2018 14:00:00	16/03/2018 16:00:00

Quiz

Assignment

Delivered by

Prof. Shanti Swarup IIT Madras



Gas Power Cycles - Thermal Engineering - 1

Gas Power Cycles - Thermal Engineering - 1

Start Date	**: 30/08/2017 23:59:59**
End Date	**:**

Topic Outline

Pre-requisite: Undergraduate engineering thermodynamics (required).
Session I
Revision of air-standard cycles. Practical realization of air standard cycles. Real effects.

Applications: I.C. engines – Transportation: Road – automobiles, motor cycles, bus, etc.), Rail: Locomotives, Water: boats and ships (tankers); Stationary applications – Generator sets (power generation); Prime movers for compressors (gas, air); pumps, machinery; Others (lawn mower, construction machinery,). Gas turbines: Propulsion applications: Aircraft engines, ship propulsion, tank drives, rail locomotives. Stationary applications power generation, and co-generation and trigeneration.

Engineering analysis and design: Transition from air standard cycle to real cycles. Heat input and rejection processes. Use of fuel or other energy source. Efficiency and impact of cycle parameters on efficiency.

Otto cycle: its processes and analysis. Practical realization of the cycle. Limitations and environmental impact, especially emissions and their control.

Diesel cycle: its processes and analysis. Practical realization of the cycle. Limitations and environmental impact, especially emissions and their control.

Session II
Dual fuel cycle: its processes and analysis. Practical realization of the cycle. Limitations and environmental impact.

Brayton cycle, Sterling cycle: its processes and analysis. Practical realization of the cycle. Limitations and environmental impact. Thermodynamic cycle for stationary applications – major considerations and its engineering realization (stationary gas turbines for power generation and ship/surface propulsion). Thermodynamic cycle for aircraft propulsion applications – major considerations and engineering realizations Typical configurations of aircraft engines.

Session III
Integrating gas power cycles for co-generation of power. Combined gas and steam power plants.

Integrating gas power cycles for waste heat recovery for process purposes: Integration with vapour absorption cycle for air-conditioning. Hot water/steam generation for heating applications.

Challenges in design – flow, turbulence management, combustion and pollutant formation, stresses and vibrations, long term thermal cycling, manufacturing, operation related wear and tear.

Historical trends and on-going R & D on IC engines and aero-engines – higher inlet temperatures, materials, environmental impact (NO_X, CO_2, soot, noise).

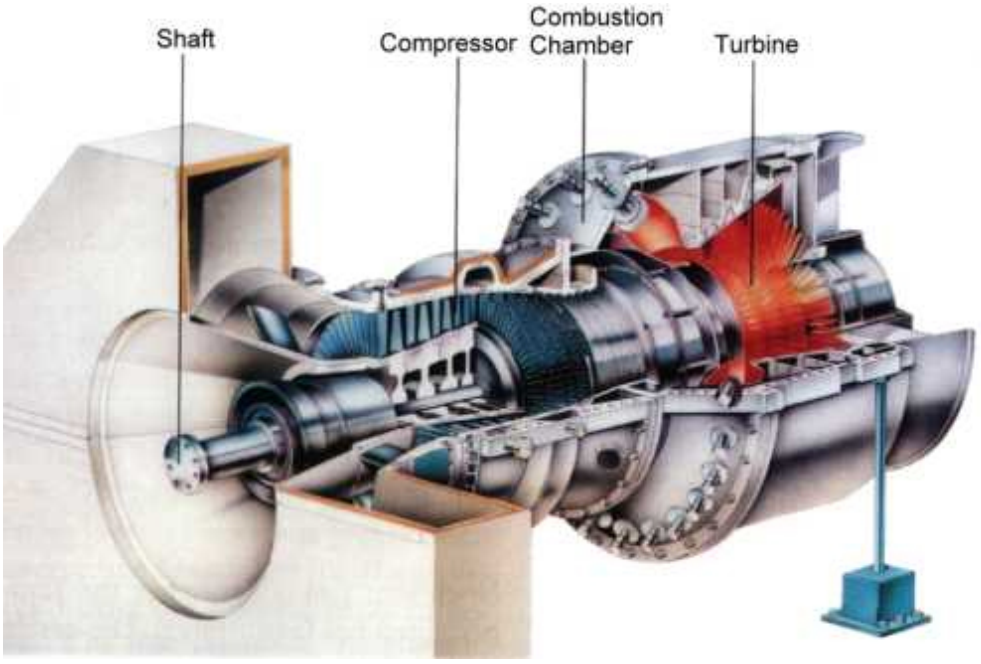
Session Schedule

Quiz

Assignment

Delivered by

Prof.S.R. Kale **IIT Delhi**



Gas Turbines - Thermal Engineering -1

Gas Turbines - Thermal Engineering -1

Start Date	**: 30/08/2017 23:59:59**
End Date	**:**

Topic Outline

Relevant Department : Mechanical Engineering and Aerospace Engineering

Relevant Semester: 5th or 6th

Pre-requisite: Basic thermodynamics

Course Description & Outline :

Introduction, Air Standard Brayton cycle, Methods to improve Gas Turbine efficiency, Gas Turbine for air craft propulsion, Numerical problems, Gas Turbine Combustion Chambers

Session Schedule

Quiz

Assignment

Delivered by

Prof. Sreedhara Sheshadri IIT Bombay

Heat Treatments - Engineering Materials and Metallurgy

Heat Treatments - Engineering Materials and Metallurgy

Start Date	**: 08/02/2018 10:00:00**
End Date	**: 07/03/2018 12:00:00**

Topic Outline

Topic Name: Heat Treatments

Relevant Course Name: Engineering Materials and Metallurgy

Relevant Department: Metallurgical Engineering and Materials Science

Relevant Semester: II

IIT Faculty Name: Prof. M.P. Gururajan

IIT: Bombay

Topic Description and Outline:

Preliminaries: phase diagrams, TTT and CCT diagrams, diffusion

Annealing: Stress relief, Recrystallization, Spheroidizing

Aging: precipitation hardenable systems

Normalising, Hardening and Tempering of steel: Austempering, martempering, case hardening, carburizing / decarburizing, nitriding, cyaniding, carbonotriding, flame and induction hardening, vacuum and plasma hardening

Hardenability, Jominy end quench test

Thermo-mechanical treatments

Elementary ideas on sintering

Pre- requisites: Materials or Metallurgical Thermodynamics Preferred: Phase transformations and diffusion

Session Schedule

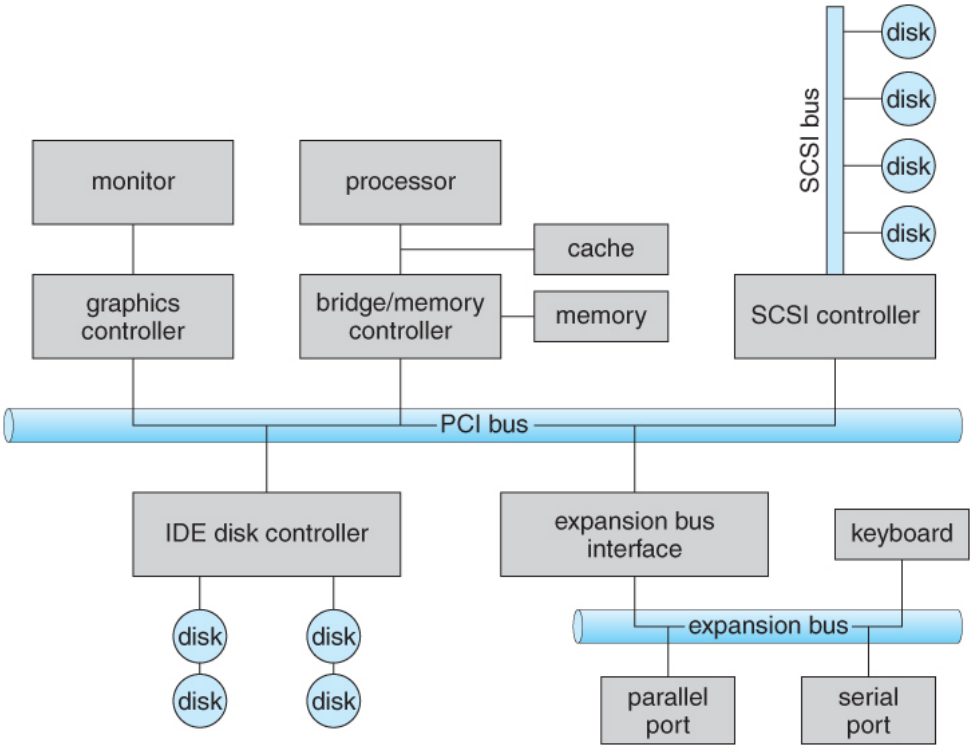
Name	Start	End
Session 1	**08/02/2018 10:00:00**	**08/02/2018 12:00:00**
Session 2	**13/02/2018 10:00:00**	**13/02/2018 12:00:00**
Session 3	**15/02/2018 10:00:00**	**15/02/2018 12:00:00**

Quiz

Assignment

Delivered by

Dr.Gururajan MP IIT Bombay



Input and Output Systems - Operating Systems

Input and Output Systems - Operating Systems

Start Date	**: 16/02/2018 14:00:00**
End Date	**: 15/03/2018 12:00:00**

Topic Outline

Relevant Course Name: Operating Systems

Relevant Department: Computer science and Engineering

Pre- requisites: Basics of Operating Systems

Topic Description and Outline:

Secondary storage structure – Disk structure, disk scheduling, disk manager, swap space management, RAID structure, scalable storage implementation

IO systems – IO hardware, application IO interface, Kernel IO subsystems, IO Performance

IO system examples – UNIX based systems

Session Schedule

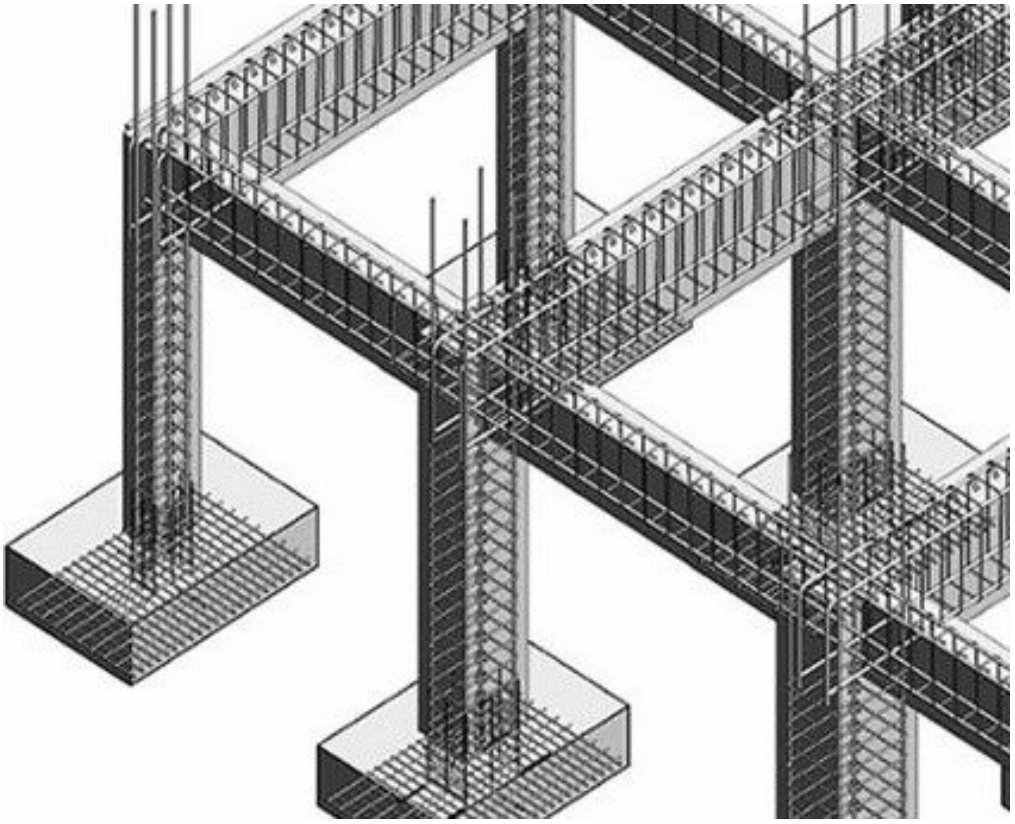
Name	Start	End
Session 1	16/02/2018 14:00:00	16/02/2018 16:00:00
Session 2	22/02/2018 10:00:00	22/02/2018 12:00:00
Session 3	23/02/2018 10:00:00	23/02/2018 12:00:00

Quiz

Assignment

Delivered by

Prof. Sandip Chakraborthy IIT Kharagpur



Limit State Design of Reinforced Concrete Beams - Design of Reinforced RCC Structures

Limit State Design of Reinforced Concrete Beams - Design of Reinforced RCC Structures

Start Date	**: 31/01/2018 14:00:00**
End Date	**: 22/02/2018 12:00:00**

Topic Outline

Relevant Course: Design of RC Structures

Relevant Department: Civil Engineering, Architecture

Relevant Semester: 5^{th}

Pre- requisites: Analysis of Structures

Topic Description and Outline:

The purpose of this course is to establish a basic understanding of design of reinforced concrete structures through Limit State Method. As many structural components (slab, staircase, retaining wall, footing, pile cap etc.) may be idealized as beam, the main emphasis in this course will be given on analysis and design of reinforced concrete beams. The following topics will be covered.

Lecture 1:

Concept of Limit State Method

Characteristic load and characteristic strength

Partial safety factors

Stress strain behaviour steel and concrete

Failure of concrete beam

Balanced, under-reinforced and over-reinforced section

Singly reinforced section and doubly reinforced section

Examples

Lecture 2:

Analysis and design of singly reinforced beam

Introduction to IS codes

Examples

Lecture 3:

Analysis and design of doubly reinforced beam Examples

Extension of beam design philosophy to other structural components (illustration)

Session Schedule

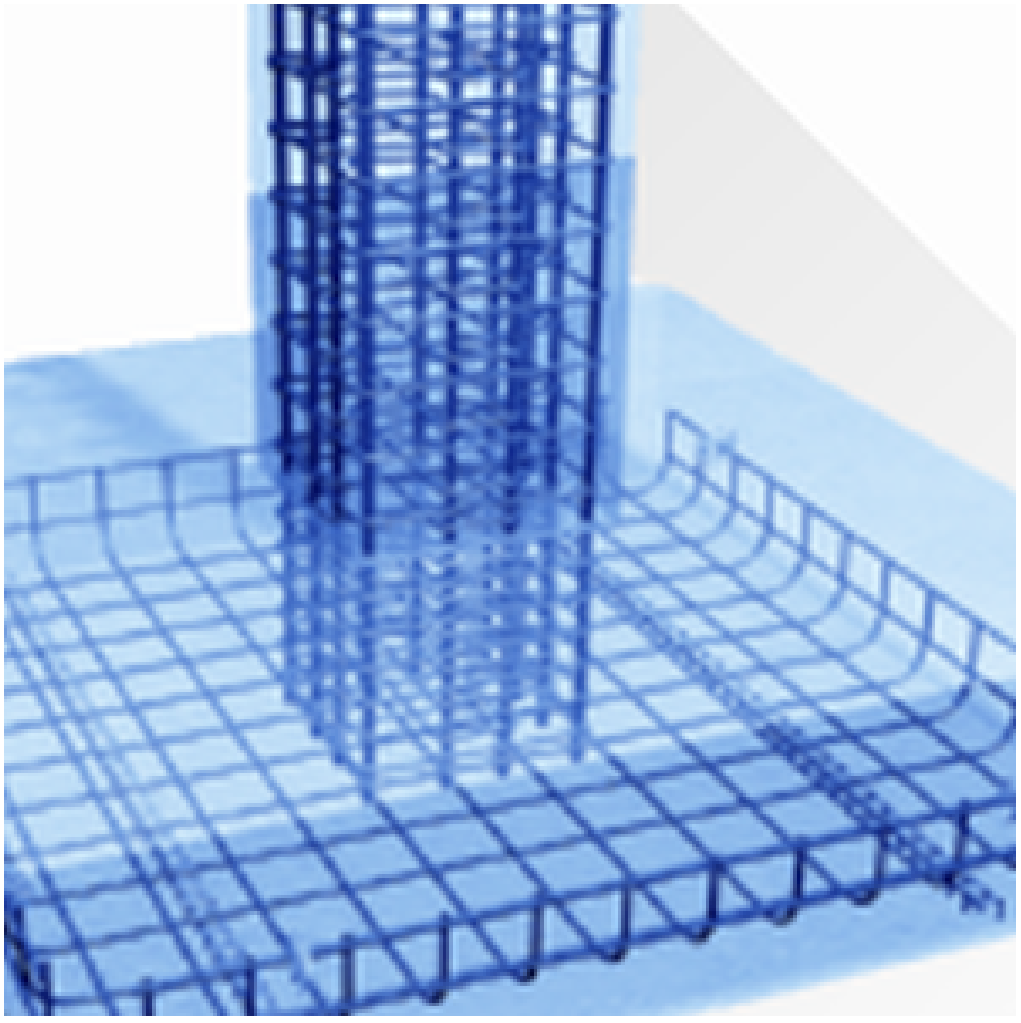
Name	Start	End
Session 1	**31/01/2018 14:00:00**	**31/01/2018 16:00:00**
Session 2	**01/02/2018 10:00:00**	**01/02/2018 12:00:00**
Session 3	**02/02/2018 10:00:00**	**02/02/2018 12:00:00**

Quiz

Assignment

Delivered by

Prof. Amit Shaw **IIT Kharagpur**



Limit State Design of Reinforced Concrete Columns - Design of Reinforced RCC Structures

Limit State Design of Reinforced Concrete Columns - Design of Reinforced RCC Structures

Start Date	**: 07/03/2018 10:00:00**
End Date	**: 29/03/2018 12:00:00**

Topic Outline

Relevant Course: Design of RC Structures

Relevant Department: Civil Engineering, Architecture

Relevant Semester: 5th

Pre- requisites: Analysis of Structures, Concept of limit state design of beam

Topic Description and Outline:

The purpose of this course is to establish a basic understanding of design of reinforced concrete structures through Limit State Method. Column is an important structural component and its understanding its design philosophy is important. The main emphasis in this course will be given on analysis and design of reinforced concrete columns. The following topics will be covered.

Lecture 1:

Introduction

Classification of columns

Unsupported and effective length

Assumptions in limit state design for comuns

Design of axially loaded short column

Examples

Lecture 2:

Design of column with axial load and uni-axial moment

Derivation of basic equation

Interaction diagram

Examples

Lecture 3:

Design of column with axial load and bi-iaxial moment

Derivation of basic equation

Examples

Long columns (just introduction)

Session Schedule

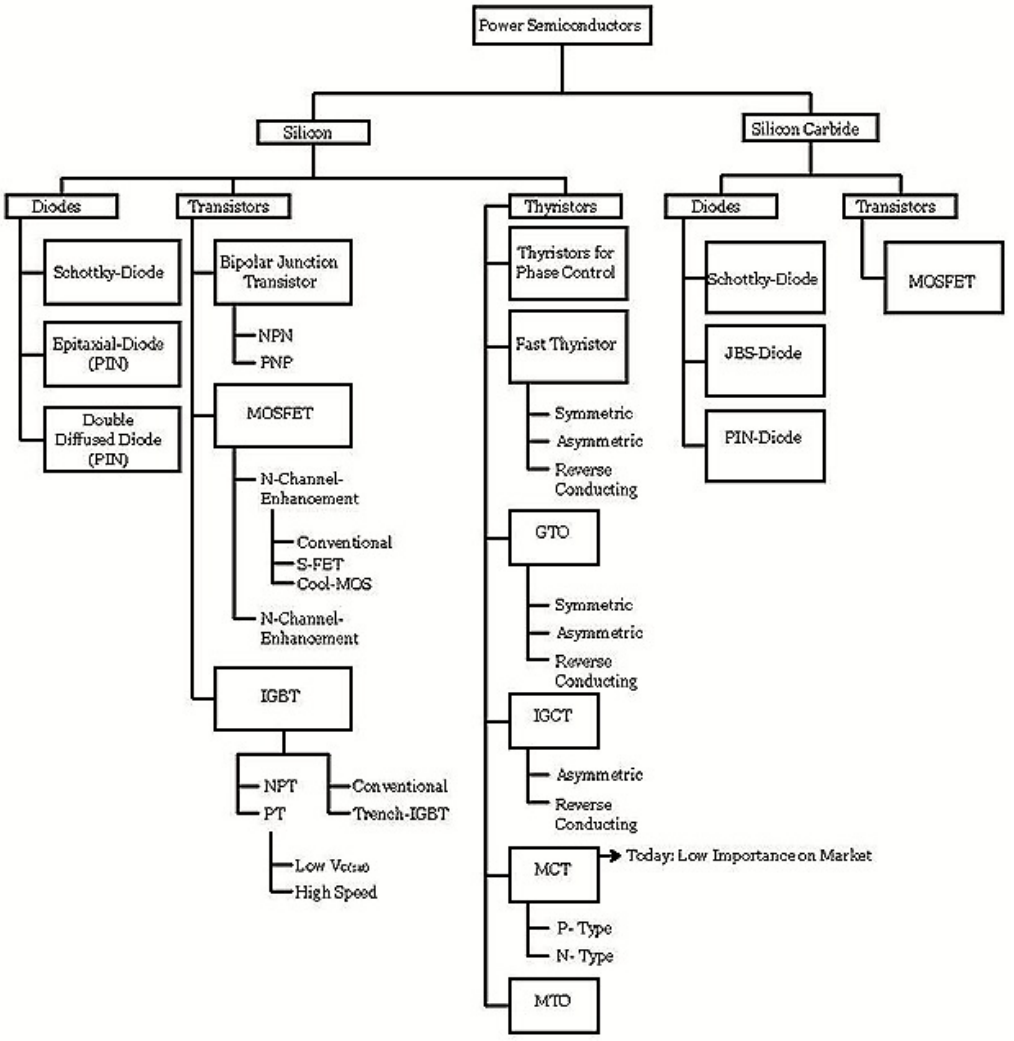
Name	Start	End
Session 1	**07/03/2018 10:00:00**	**07/03/2018 12:00:00**
Session 2	**08/03/2018 10:00:00**	**08/03/2018 12:00:00**
Session 3	**09/03/2018 10:00:00**	**09/03/2018 12:00:00**

Quiz

Assignment

Delivered by

Prof. Amit Shaw **IIT Kharagpur**



Power Semiconductor Device and Associated Gate Driving Technology - Power Electronics

Power Semiconductor Device and Associated Gate Driving Technology - Power Electronics

Start Date	**: 18/01/2018 14:00:00**
End Date	**: 11/02/2018 16:00:00**

Topic Outline

Relevant Dept- Electrical Dept Students

Any pre requisites to attend this topic-Nil (Lecture from Basics)

Syllabus as follows:

- Power transistors
- Fast recovery diodes
- Thyristors
- Power TRIAC, MOSFET, IGBT, IGCT - characteristics, rating, Protection circuits, Driver Circuits.

Session Schedule

Name	Start	End

Session 1	**18/01/2018 14:00:00**	**18/01/2018 16:00:00**
Session 2	**19/01/2018 14:00:00**	**19/01/2018 16:00:00**
Session 3	**22/01/2018 14:00:00**	**22/01/2018 16:00:00**

Quiz

Assignment

Delivered by

Prof. Kamalesh Hatua **IIT Madras**

Process Management - Operating Systems

Process Management - Operating Systems

Start Date	**: 19/03/2018 10:00:00**
End Date	**: 17/04/2018 12:00:00**

Topic Outline

Topic Name: Process Management

Relevant Course Name: Operating Systems

Relevant Department: Computer science and Engineering

Relevant Semester: 5th

IIT Faculty Name: Prof. Chester Rebeiro

IIT: Madras

Topic Description and Outline:

Class 1: Processes, Process life cycle, Interrupts,

Class 2: context switching, scheduling

Class 3: Synchronization primitives,

Pre- requisites:

Data Structures

Computer Organization / Architecture

Session Schedule

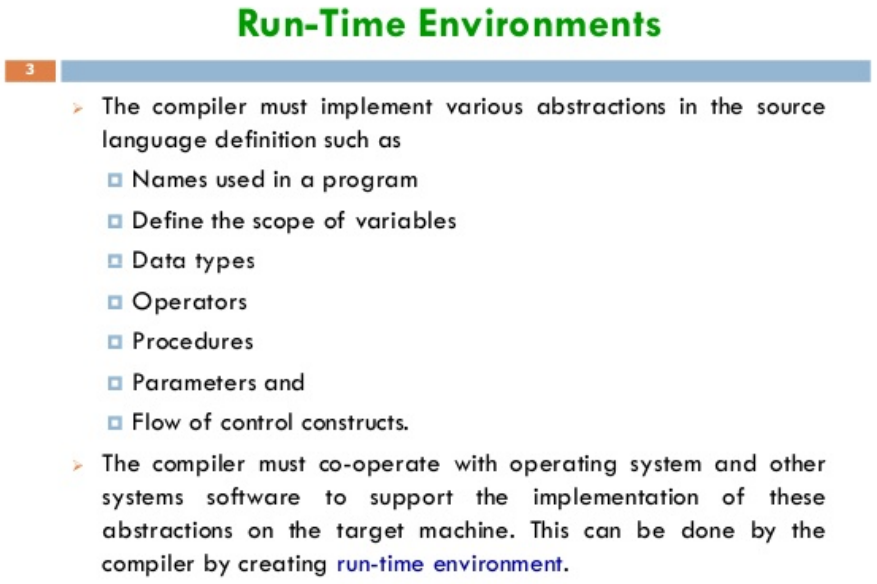
Name	Start	End
Session 1	19/03/2018 10:00:00	19/03/2018 12:00:00
Session 2	23/03/2018 10:00:00	23/03/2018 12:00:00
Session 3	28/03/2018 10:00:00	28/03/2018 12:00:00

Quiz

Assignment

Delivered by

Prof. Chester Rebeiro IIT Madras



Runtime Environments - Principles of Compiler Design

Runtime Environments - Principles of Compiler Design

Start Date	**: 07/02/2018 10:56:47**
End Date	**:**

Topic Outline

Topic Name: Runtime Environments

Relevant Course Name: Principles of Complier Design

Relevant Department: Computer science and Engineering

Relevant Semester:

Topic Description and Outline:

Lecture 1: Quick review of semantic analysis of declarations in C/C++. Basic issues in Runtime Environments. Data types supported by PL – scalars, arrays, records, unions, classes. PL Support for recursion and creation of dynamic data structures. Organization of data objects, such as globals, locals, parameters, non- locals so that their addresses can be resolved at compile time. Illustration of data layout using gcc for various data and code segments.

Lecture 2: Issues of PLs that support programs with non-trivial nesting. Compilation of dynamic data sructures. Division of memory; structure of activation records (AR); accessing information in AR. Implementation of access to non-local variables; static link and dynamic link and their role in handling lifetime and scope of data objects. Issues in compiling function calls with recursion and the role of AR. Parameter passing mechanisms with examples and their compilation issues.

Lecture 3: Issues for compiling call to a function with parameters and return value. Intermediate code sequences to be generated for call by value and call by reference parameter passing mechanisms. Division of labor between caller and callee functions and prolog and epilogue code fragments to be inserted by the compiler. Tutorial on illustration of runtime environments by compare C source code and generated 64 bit X64 assembly code.

Pre- requisites: This module assumes familiarity with LALR(1) parser, Semantics Directed Translation Scheme (SDTS) particularly for declaration processing and function calls. The earlier QEEE modules delivered under Compiler Design : LR Parsing : Theory and practice, have the relevant pre-requisite material.

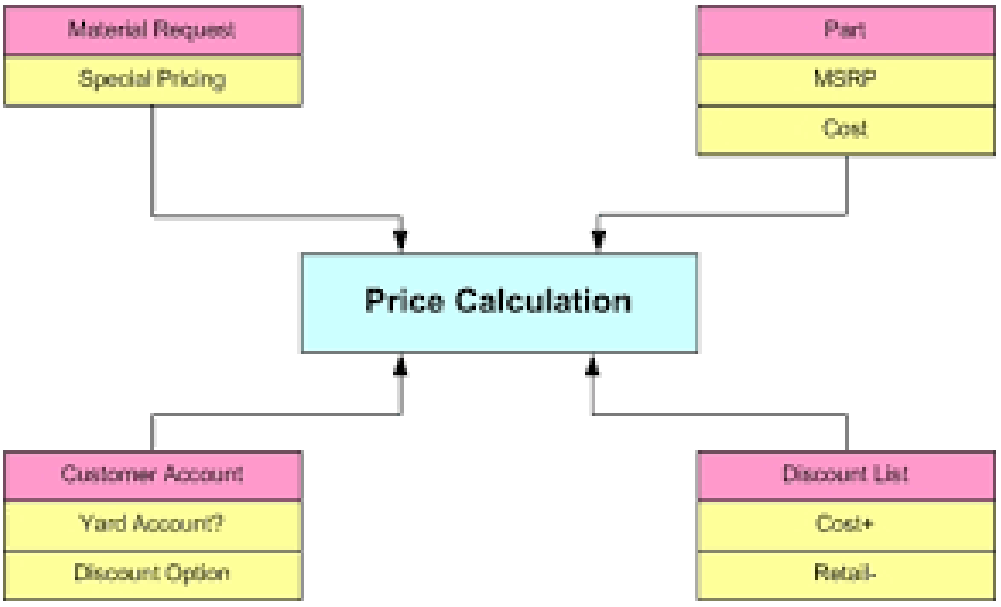
Session Schedule

Quiz

Assignment

Delivered by

Prof. Supratim Biswas **IIT Bombay**



Software Aspects - Microprocessor and Microcontroller - 8086

Software Aspects - Microprocessor and Microcontroller - 8086

Start Date	**: 30/08/2017 23:59:59**
End Date	**:**

Topic Outline

Relevant Dept – EEE, ECE, Computer Science, Information Technology, Instrumentation.

Pre-requisite – Nil

Session-1:

8086 Architecture – Internal block diagram, Register organization, stack structure. 8086 pin diagram and pin descriptions. Addressing modes, Instruction Formats. Timing diagrams- Minimum mode and Maximum mode.

Session-2

Instruction set: Data transfer instructions, Arithmetic instructions, Logical instructions, String instructions, Branch instructions and processor control instructions. Assembler directives. I/O programming and multi programming.

Session-3

Assembly language programming, Procedures, Macros, Interrupts and interrupt service routines, BIOS function calls.

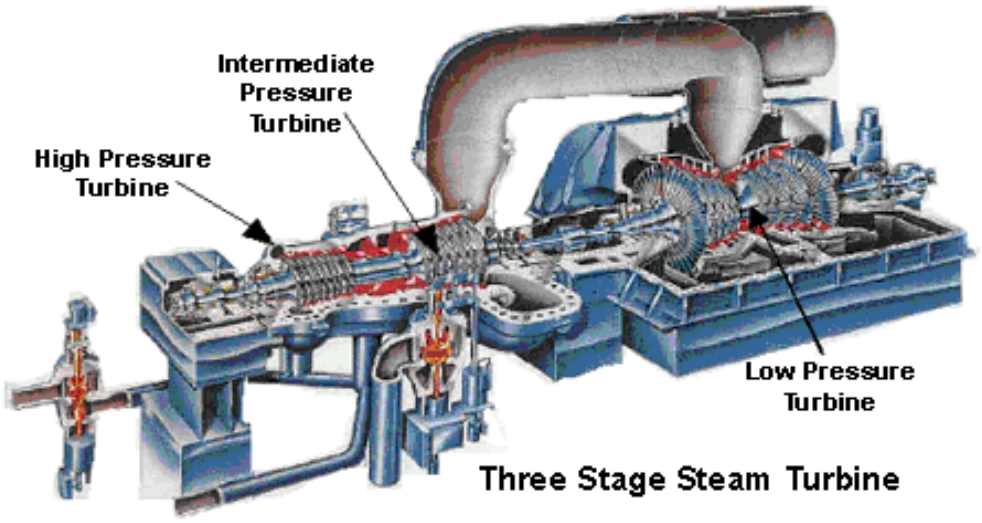
Session Schedule

Quiz

Assignment

Delivered by

Prof. Venkatesh TG IIT Madras



Steam Turbines - Thermal Engineering - 2

Steam Turbines - Thermal Engineering - 2

Start Date	**: 30/08/2017 23:59:59**
End Date	**:**

Topic Outline

Pre-requisite: Undergraduate engineering thermodynamics (required). Fluid mechanics basic course (preferable).

Session I

An overview of steam turbine as an engineered product – typical construction and components (incl. photographs).

Applications: fossil fuelled thermal power plants, nuclear power plants, solar thermal power plants, captive power generation, co-generation, marine propulsion (ships and submarines).

Steam turbine systems: steam system, lubricating oil system, sealing system, controland governing system, instrumentation and control systems.
Construction features: Casing, rotor, stator and rotor blades, bearings, seals, mountings and foundation.

Principles related to turbines: Fundamental principles of turbines – conservation of mass, conservation of momentum (2nd law of motion), conservation of energy (1 st law of thermodynamics), 2nd law of thermodynamics. Turbines as a component of a thermodynamic cycle – intake and exhaust conditions. Isentropic efficiency – typical values and the trends.

Classification based on working substance: Water: hydraulic turbines or hydroturbines;Steam: steam turbine; Gas (hot gas from oil/gas combustion in air) gas turbine, aero-engine, turbo-charger; Air wind turbine. Oil: hydraulic coupling, torque converter. How the substance and parameters (pressure, density, temperature, etc.) influence the mechanical design of a turbine.

Engineering analysis and design: Basic principle of conversion of fluid flow into mechanical shaft power. Concept of a flow passage and conservation laws. Flow through a moving passage and conservation laws. Real flow passages in a steam turbine – HP, IP and LP turbines. The idea of a blade. Blades arranged on a shaft – resulting passages. Features of the flow through the passages and methodology to understand the working. Typical questions posed by designers and operating personnel. Some trends in the development of steam turbines (pressures, temperatures, capacity, materials, efficiency

Session II

Converting the real flow passage to an idealized linear cascade. Major assumptions.

The concept of fixed blades and rotating blades and their modeling as fixed and moving linear cascades. Definition of a stage.

Basic analysis: Assumptions – 1-dimensional flow, no friction, internally reversible flow through the passage.

Thermodynamic processes occurring during flow through a stage T – s and h – s diagrams.

Fixed cascade: Thermodynamic process – flow without enthalpy change vs. flow with enthalpy drop. Flow directions at inlet and outlet of passage. Accelerating flow –

subsonic and super-sonic conditions. Forces on the passage, forces on a set of parallel identical passages.

Moving cascade: Blade velocity assumption (uniform over blade height). Choice of reference frame. Thermodynamic processes – without, or with enthalpy drop. Forces on the passage – axial and radial forces. Power produced by a passage and by a set of passages in parallel. Inlet and exit velocity diagrams (triangles). Blade efficiency.

Session III

Extension of linear cascade theory to a set of rotating blades. Real effects – height of blade, variation of blade local velocity from hub to tip. Need for twisted blades.

Stage design concepts: Impulse principle. Reaction principle.

Matching stator and rotor blades characteristics.

Inlet and exhaust pressures of a steam turbine and related specific volume changes. Condensing and back-pressure turbines. Extraction turbines.

Compounding of stages. Multi-stage blading in a turbine (casing and rotor). Limitations of turbine size for multi-staging. Multi-cylinder turbines – series connection. Cross-compounding of turbines. Pictures.

Typical parameters in turbines: Inlet pressure and temperature, reheat turbines, turbines handling wet steam.

Challenges in turbine design – flow, turbulence management, stresses and vibrations, long term thermal cycling, manufacturing, operation related (erosion, deposition, corrosion).

Historical trends and on-going R & D on turbines – higher inlet temperatures.

Session Schedule

Quiz

Assignment

Delivered by

Prof.S.R. Kale IIT Delhi

Storage Management - Operating Systems

Storage Management - Operating Systems

Start Date	**: 29/01/2018 14:00:00**
End Date	**: 22/02/2018 16:00:00**

Topic Outline

Relevant Course Name: Operating Systems

Relevant Department: Computer science and Engineering

Relevant Semester: Spring 2018

Pre- requisites: Basics of Operating Systems

Topic Description and Outline:

File System – Basic concepts of file systems and access technologies, Directory and disk structures, File system mounting, Protection of file systems

File System implementation – File system structure and directory implementation, Allocation methods, free space management, File system performance, Recovery

Distributed file system – Naming and transparency, Remote file access, stateful versus stateless services

Example file system – UNIX based file system architecture

Session Schedule

Name	Start	End
Session 1	29/01/2018 14:00:00	29/01/2018 16:00:00
Session 2	31/01/2018 10:00:00	31/01/2018 12:00:00
Session 3	02/02/2018 14:00:00	02/02/2018 16:00:00

Quiz

Assignment

Delivered by

Prof. Sandip Chakraborthy IIT Kharagpur