# K.S.R.M. College of Engineering(AUTONOMOUS) - KADAPA.

## Department of Computer Science and Engineering

**CIRCULAR**

The following are the list of the value added courses for the academic year 2014-15.

| S. No. | B.Tech, Sem | Value Added Course | Course Duration | Coordinator | Faculty coordinators | Total No. of Students |
|---|---|---|---|---|---|---|
| 1 | III B.Tech, I sem & IV B.Tech I Sem | .Net technology | 14/7/2014 to 2/8/2014 | Sri B. Peda Narayana | Sri G. Nagendra Babu<br>Sri Y. Prasad Reddy | 60 |
| 2 | II,III and IV B.Tech | Soft Skills | 4/8/2014 to 23/8/2014 | Sri K. Eswar Reddy | Sri K. Vijaya Bhaskara Reddy,<br>Sri K. Eswar Reddy | 100 |
| 3 | III &IV B.Tech, I Sem | Android Application Development | 8/9/2014 to 27/9/2014 | Smt S. Riyaz Banu | Sri S.Gururaja<br>Sri S. Khaja Khizer | 70 |
| 4 | II,III and IV B.Tech | English Communication Skills | 15/12/2014 to3/1/2015 | Sri N. Basker Reddy | Sri N. Basker Reddy<br>Sri A. Anand Rao | 70 |
| 5 | IV B.Tech II Sem | Internet of Things | 15/12/2014 to3/1/2015 | Sri S. Khaja Khizer | Smt B. Gouri<br>Smt S. Riyaz Banu | 40 |
| 6 | III,IV B.Tech II sem(A/s&B/s) | Python Programming | 19/1/2015 to 4/2/2015 | Sri N. Suresh Babu | Sri B. Peda Narayana<br>Miss A. Haritha | 60 |

Head of the Department

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 12/07/2014

**Sub:** Workshop on ".NET Technology" for CSE Students - Reg.

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It is inform all the students that college is going to conduct Workshop on ".NET Technology" from 14/07/2014 to 2/8/2014 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 02.03.2018.

**Co-coordinators:** Sri G. Nagendra Babu, Asst.Prof, Dept of CSE

Sri Y. Prasad Reddy, Asst.Prof, Dept of CSE

Sd/-xxxxx

PRINCIPAL

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 12.07.14

| | | |
|---|---|---|
| Name of the of Course | : | .NET TECHNOLOGY |
| Coordinator | : | Sri B. Peda Narayana |
| Faculty Coordinator | : | Sri G. Nagendra Babu<br>Sri Y. Prasad Reddy |
| Duration of the Course | : | 14/7/2014 to 2/8/2014 |
| **Course Description** | : | |
| Objective of the Course: | : | .Net is a framework that provides programming guidelines that can be used to develop a wide range of applications from web to mobile to windows-based application. |
| List of Modules | : | |
| I | : | Introduction to the .NET initiative and the .NET platform |
| II | : | Code Management |
| III | : | Object oriented programming concepts |
| IV | : | Error and Exception handling |
| V | : | Using controls and components for designing application. |
| VI | : | Design web application using ASP.net |
| Outcome of the Course | : | 1. Understand the basics of VB.NET&ASP.NET<br>2. Understand the concept of error and exception handling .<br>3. Understand the OOPS Concepts. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date:06.08.14

**A brief report of the Course**

A Software Implementation Training program is held during 14/7/2014 – 02/8/2014 on " .Net Technology " for III and IV B.Tech students in MB 210 computer lab II from 04-06 PM .

Sri B. Peda Narayana, Asst.Prof, CSE- Dept., has given excellent training to the students with various practical examplesAll the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Sri G. Nagendra Babu, Asst.Prof, CSE- Dept.,

Sri Y. Prasad Reddy, Asst.Prof, CSE Dept.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 01.08.2014

This is to inform for all the students (II, III, IV B.Tech) that department is decided to conduct value added courses other than the curriculum for enhancing the **soft skills** effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the courses, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning soft skills. The students those who are interested can give their names to the following faculty.

Sri K. Vijaya Bhaskara Reddy, Asst.Prof, Humanities Dept

Sri E. Eswar Reddy, Asst.Prof, Humanities Dept

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 01.08.2014

| | | |
|---|---|---|
| Name of the of Course | : | Soft Skills |
| Coordinator | : | Sri K. Vijaya Bhaskara Reddy |
| Faculty Coordinator | : | Sri K. Eswar Reddy |
| Duration of the Course | : | 4/8/2014 to 23/8/2014 |
| **Course Description** | : | |
| Objective of the Course: | : | To enable students to inculcate proficiency in professional communication to meet the growing demand in the field of Global communication. To acquire ability to speak effectively in real life situations, to improve grammatical and communicative skills. |
| List of Modules | : | |
| I | : | Meaning and Definition – Process – Functions–Objective – Importance- Types and Communication barriers. |
| II | : | Technical writing Process, Writing drafts and revising, Collaborative creating indexes. |
| III | : | Editing strategies, introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing. |
| IV | : | Self assessment, Personal goal setting, career planning, Managing Time. |
| V | : | Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity. |
| VI | : | Public speaking, Group discussion, Oral presentation, Interviews, Graphic presentation, Presentation aids, Personality Development. |
| VII | : | Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Complex problem solving, Creativity. |
| Outcome of the Course | : | After completion of the course students able learn about Technical writing, Self assessment, Public speaking, Group discussion, Oral presentation, Interviews and Rapid reading. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 25.8.14

**A brief report of the Course**:

A Personality Development program is held during 04 – 28Augest - 2014 on "**Soft Skills**" for II, III and IV B.Tech Students in MB 301 From 04-06 PM (Everyday).

Sri K.Vijaya Bhaskara Reddy, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. Students have participated in Group Discussions , Debate competitions held during the course duration.

All the participants are satisfied with his teaching methodologies and students have learned various personality development skills.

The Faculty Coordinator : Sri.K.Eswar Reddy, Asst.Prof.Humanities, dept

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 04.09.2014

It is inform all the III and IV B.Tech students that college is going to conduct Workshop on "**Android Application Development**" from 08/09/2014 to 27/9/2014 (Every day at 04.00 PM to 06:00PM).The students those who are interested to participate in the above workshop may register their names with the following staff on or before 06.09.2014.

Sri S. Guru Raja, Asst. Prof, Dept of CSE

Sri S. Khaja Khizer, Asst. Prof, Dept of CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA
## (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 04.09.2014

| | | |
|---|---|---|
| Name of the of Course | : | Android Application Development |
| Coordinator | : | Smt. S. Riyaz Banu |
| Faculty Coordinator | : | Sri. S. Gururaja<br>Sri. S. Khaja Khizer |
| Duration of the Course | : | 8/9/2014 to 27/9/2014 |
| **Course Description** | : | |
| Objective of the Course: | : | Android Application Development course is designed to quickly get you up to speed with writing apps for Android devices. The student will learn the basics of Android platform and get to understand the application lifecycle. |
| List of Modules | : | |
| I | : | Programming Revision (Object Oriented Programming Concepts & Java fundamental) |
| II | : | Android : Activities , Content Providers , Intents , Services ,Storage, Network, Multimedia , GPS , Phone Services , XML Layouts , widgets , permission , Sensor Manager - Accelerometer, gyroscope etc. |
| III | : | . Threads, Animation, Refresher handler, Game Engine, Animated 2D Games, Google Play Store and Lot more. |
| IV | : | . Basics of Data Base, Introduction to SQ Lite and CRUD operations. |
| Outcome of the Course | : | By the end of the course, student will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 30.09.14

**A brief report of the Course:**

A Software Implementation Training program is held during 08 - 27 Sep -2014 on "Android Application Development" for III and IV B.Tech students in MB 210 computer lab I from 04-06 PM (Everyday).

Smt S. Riyaz Banu, Asst.Prof, CSE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their doubts.

All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Sri S. Gururaja, Asst.Prof, CSE– Dept.

Sri S. Khaja Khizer, Asst.Prof,CSE – Dept.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 09.12.2014

It is inform all the students that college is going to conduct Workshop on "***Internet of Things***" from 15/12/2014 to 3/1/2015 (Every day at 04.00 PM to 06:00PM).The students those who are interested to participate in the above workshop may register their names with the following staff on or before 12.12.2014.

Smt B. Gouri, Asst. Prof, Dept of CSE

Smt S. Riyaz Banu, Asst. Prof, Dept of CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 09.12.14

| | | |
|---|---|---|
| Name of the of Course | : | Internet of Things (IoT) |
| Coordinator | : | Sri S. Khaja Khizer |
| Faculty Coordinator | : | Smt.B.Gouri<br>Smt.S.Riyaz banu |
| Duration of the Course | : | 15/12/2014 to3/1/2015 |
| **Course Description** | : | |
| Objective of the Course: | : | To gain knowledge about IoT applications across various segments, skills required in building blocks and IoT product. |
| List of Modules | : | |
| I | : | Overview of IoT and High level Architecture and Setting up IoT work-flow |
| II | : | Programming with Advanced C / Embedded C |
| III | : | Micro-controller programming using Arduino, Programming with Python. |
| IV | : | Building IOT Applications using Raspberry Pi |
| V | : | IOT Cloud Infrastructure |
| VI | : | Performance and Security in IOT |
| Outcome of the Course | : | After completion of this course students to be equipped with a solid theoretical foundation systematic professional knowledge and strong practical skills in the fields of computer technology communications networks and IT that provides a wide range of applications in the Internet of Things. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 06.01.15

**A brief report of the Course**:

A Workshop is held during 15/12/2014 to3/1/2015 on "Internet of Things (IoT) " for IV B.Tech Students in MB 110 Computer lab - 7 From 04-06 PM (Everyday).

Sri S.Khaja Khizer, Asst.Prof, CSE , Dept., has given excellent training to the students with various practical examples. Students has clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Smt.B.Gouri, Asst.Prof - CSE

Smt.S.Riyaz banu, Asst.Prof - CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 09.12.2014

This is to inform for all the II, III & IV B. Tech students that department is decided to conduct value added courses other than the curriculum for enhancing **English Communication skills** effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the course, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technology (Internet of Things). The students those who are interested can give their names to the following faculty members.

Sri N. Basker Reddy – Asso.Prof., Dept of Humanities

Sri A. Anand Rao - Asst.Prof., Dept of Humanities

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 12.12.14

| | | |
|---|---|---|
| Name of the of Course | : | English Communication Skills |
| Coordinator | : | Sri N. Bhaskara Reddy |
| Faculty Coordinator | : | Sri A. Anand Rao |
| Duration of the Course | : | 15.12.14 - 03.01.15 |
| **Course Description** | : | |
| Objective of the Course: | : | Throughout this course, students will learn communication, problem solving and presentation skills as they relate to a more efficient and collaborative work environment. |
| List of Modules | : | |
| I | : | Creativity, Innovation, and Change and the Knowledge Economy. |
| II | : | Problem Solving in High-Performing Teams |
| III | : | Leadership in Engineering: Skills & Strategies |
| IV | : | Communication skills, Body language, Making Decisions. |
| V | : | Self Motivation Leadership Skills Team-Working Skills, Creativity and Problem Solving Skills, Time Management. |
| VI | : | Practicing a presentation: Importance, Techniques and feedback |
| Outcome of the Course | : | After completion of this course students will be able to acquire knowledge in personality development, time management, leadership qualities and skill development. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of **Computer Science and Engineering**

Date: 06.01.15

**A brief report of the Course**:

A Workshop is held during 5/12/2014 to 03/01/2015 on " Soft Skills" for B.Tech Students in MB 301 From 04-06 PM (Everyday).

Sri N. Bhaskara Reddy, Asso.Prof, Humanities dept., and Sri A. Anand Rao, Asst.Prof, Humanities dept., has given excellent training to the students with various examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 14.1.2015

This is to inform for all the III & IV B. Tech students that department is decided to conduct value added course "**Python Programming**" other than the curriculum for enhancing the technical skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the course and faculty coordinators will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for improving the technical skills. The students those who are interested can give their names to the following faculty members.

Sri B. Peda Narayana - Asst.Prof., Dept of CSE

Miss A. Haritha - Asst.Prof., Dept of CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 14.01.2015

| | | |
|---|---|---|
| Name of the of Course | : | Python Programming |
| Coordinator | : | Sri N. Suresh Babu |
| Faculty Coordinator | : | Sri B. Peda Narayana<br>Miss A. Haritha |
| Duration of the Course | : | 19.01.15- 04.02.15 |
| **Course Description** | : | |
| Objective of the Course: | : | To know the basics of algorithmic problem solving, read and write simple Python programs, develop Python programs with conditionals and loops, define Python functions and call them. |
| List of Modules | : | |
| I | : | Algorithms, building blocks of algorithms , notation,<br>algorithmic problem solving, simple strategies for developing algorithms. |
| II | : | Python interpreter and interactive mode; valu es and types; statements, tuple assignment, precedence of operators, comments; |
| III | : | Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); |
| IV | : | Iteration: state, while, for, break, continue, pass; Fruitful functions: return values, parameters. |
| V | : | Strings: string slices,<br>immutability, string functions and<br>methods, string module; Lists as arrays. |
| VI | : | Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; |
| VII | : | Dictionaries: operations and methods; advanced list processing, Illustrative programs: selection |

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| | | sort, insertion sort, mergesort, histogram. |
| VIII | | Files and exception: text files, reading and writing files, format operator; handling exceptions, modules, packages; |
| Outcome of the Course | : | Upon completion of the course, students will be able to -- Develop algorithmic solutions to simple computational problems, Read, write, execute by hand simple Python programs, Structure simple Python programs for solving problems, Decompose a Python program into functions, Represent compound data using Python lists, tuples, dictionaries, Read and write data from/to files in Python Programs. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 06.02.15

**A brief report of the Course**:

A Workshop is held during 19/1/15 to4/2/15 on "Python Programming " for B.Tech III, &IV Students in MB 210 Computer lab II From 04-06 PM (Everyday).

Sri N. Suresh Babu, Asst. Prof, CSE Dept., has given excellent training to the students with various examples. Students have practiced programs and clarified their droughts.

All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.

The Faculty Coordinator : Sri B. Peda Narayana, Asst.Prof, Cse-Dept.

Miss A. Haritha, Asst,Prof, CSE-Dept.

Head of the Department

# K.S.R.M. College of Engineering(AUTONOMOUS) - KADAPA.

## Department of Computer Science and Engineering

**CIRCULAR**

The following are the list of the value added courses for the academic year 2015-16.

| S. No. | B.Tech, Sem | Value Added Course | Course Duration | Coordinator | Faculty coordinators | Total No. of Students |
|---|---|---|---|---|---|---|
| 1 | III & IV B.Tech | Soft skills | 13/07/2015 to 1/8/2015 | Sri K. Eswar Reddy | Sri K. Vijaya Bhaskara Reddy | 50 |
| 2 | III &IV B.Tech | Web designing | 10/8/2015 to 29/8/2015 | Sri N. Suresh Babu | Dr M.Srinivasulu<br>Smt. T. Sri Lakshmi | 65 |
| 3 | III &IV B.Tec, | Advanced Java Programming | 8/1/2016 to 16/2/2016 | Dr T.Nedunchezhian | Sri B. Peda Narayana<br>Miss A.Haritha | 60 |
| 4 | II,III and IV B.Tech | Python Programming | 29/2/2016 to19/3/2016 | Dr. G. Amrithayogam | Sri. N. Suresh Babu<br>Smt. P. Gnaneswari | 50 |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 08.07.2015

This is to inform for all the students ( III, IV B.Tech) that department is decided to conduct value added course: "**Soft Skills**", other than the curriculum for enhancing the communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the courses and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning soft skills. The students those who are interested can give their names to the following faculty.

Sri K. Eswar Reddy, Asst.Prof., Humanities department

Head of the Department

# K.S.R.M. College of Engineering (AUTONOMOUS) - KADAPA
## Department of Computer Science and Engineering

Date: 08.07.2015

| | | |
|---|---|---|
| Name of the of Course | : | Soft Skills |
| Coordinator | : | Sri K. Eswar Reddy |
| Faculty Coordinator | : | Sri K. Vijaya Bhaskara Reddy |
| Duration of the Course | : | 13/07/2015 to 1/8/2015 |
| **Course Description** | : | |
| Objective of the Course: | : | To enable students to inculcate proficiency in professional communication to meet the growing demand in the field of Global communication. To acquire ability to speak effectively in real life situations, to improve grammatical and communicative skills. |
| List of Modules | : | |
| I | : | Meaning and Definition – Process – Functions–Objective – Importance- Types and Communication barriers. |
| II | : | Technical writing Process, Writing drafts and revising, Collaborative creating indexes. |
| III | : | Editing strategies, introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing. |
| IV | : | Self assessment, Personal goal setting, career planning, Managing Time. |
| V | : | Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity. |
| VI | : | Public speaking, Group discussion, Oral presentation, Interviews, Graphic presentation, Presentation aids, Personality Development. |
| VII | : | Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Complex problem solving, Creativity. |
| Outcome of the Course | : | After completion of the course students able learn about Technical writing, Self assessment, Public speaking, Group discussion, Oral presentation, Interviews and Rapid reading. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 04.8.2015

**A brief report of the Course**:

A Personality Development program is held during 13/7/2015 to 1/8/2015 on "**Soft Skills**" for III and IV B.Tech Students in MB 301 From 04-06 PM (Everyday).

Sri. K. Eswar Reddy, Asst.Prof. Humanities – dept., and Sri K. Vijaya Bhaskara Reddy, Asst.Prof, Humanities - dept., has given excellent training to the students with various examples. Students have participated in Group discussions, Debate competitions held during the course duration.

All the participants are satisfied with his teaching methodologies and students have learned various personality development skills.

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

**Department of Computer Science and Engineering**

**CIRCULAR**

Date: 03.08.2015

It is inform all the students that college is going to conduct Workshop on "Web Design" from 10/8/2015 to 29/8/2015 (Every day at 04.00 PM to 06:00PM).The students those who are interested to participate in the above workshop may register their names with the following staff on or before 06.09.2014.

Dr. M. Sreenivasulu, Asso. Prof, CSE – Dept.,

Smt. T. Sri Lakshmi, Asso. Prof, CSE – Dept.,

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 03.08.2015

| | | |
|---|---|---|
| Name of the of Course | : | Web Design |
| Coordinator | : | Sri N. Surresh Babu |
| Faculty Coordinator | : | Dr. M. Sreenivasulu<br>Smt. T. Sri Lakshmi |
| Duration of the Course | : | 10/8/2015 to 29/8/2015 |
| **Course Description** | : | |
| Objective of the Course: | : | Become familiar with graphic **design** principles that relate to **web design** and learn how to implement theories into practice. Develop skills in analyzing the usability of a **web** site. Understand how to plan and conduct user research related to **web** usability. Learn the language of the **web**: HTML, DHTML, Java Script and CSS. |
| List of Modules | : | |
| I | : | Hyper Text Markup Language<br>• Internet basics<br>• Introduction to HTML<br>• Lists<br>• Adding graphics to HTML documents<br>• Tables<br>• Linking documents<br>• Frames<br>• Projects in HTML |
| II | : | Java Script<br>• Introduction to Java script<br>• The Java script document object model<br>• Forms used by a website<br>• Cookies<br>• Projects in Java script |
| III | : | Dynamic Hyper Text Markup Language<br>• Cascading Style Sheets<br>Font attributes<br>Color and background attributes |

| | | |
|---|---|---|
| | | Text attributes<br>Border attributes<br>Margin related attributes<br>List attributes<br>• Class<br>External Style Sheets<br>Working with Java script style sheets<br>Layers |
| Outcome of the Course | : | i. Employ fundamental computer theory to basic programming techniques.<br>ii. Use fundamental skills to maintain **web** server services required to host a website.<br>Iii. Select and apply markup languages for processing, identifying, and presenting of information in **web** pages. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date:31.08.2015

**A brief report of the Course**

A Software Implementation Training program is held during 10/8/2015 – 29/8/2015 on "Web Design " for III and IV B.Tech students in MB 210 computer lab II from 04-06 PM .

Sri N. Suresh Babu, Asst.Prof, CSE-Dept, Dr. M. Sreenivasulu, Asso.Prof, CSE- Dept., and Smt. T.Sri Lakshmi, Asso.Prof, CSE- Dept., has given excellent training to the students with various practical examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

**Department of Computer Science and Engineering**

**CIRCULAR**

Date: 04.01.2016

It is inform all the students that college is going to conduct Workshop on "***Advanced Java Programming***" from 8/1/2016 to 16/2/2016 (Every day at 04.00 PM to 06:00PM).The students those who are interested to participate in the above workshop may register their names with the following staff on or before 06-01-2016.

Sri B. Peda Narayana, Asst. Prof, CSE – Dept.,

Miss A. Haritha, Asst. Prof, CSE – Dept.,

Head of the Department

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 04.01.2016

| | | |
|---|---|---|
| Name of the of Course | : | Advanced Java Programming |
| Coordinator | : | Dr. T. Nedunchezhian |
| Faculty Coordinator | : | Sri B. Peda Narayana<br>Miss A. Haritha |
| Duration of the Course | : | 08.01.2016 To 16.02.2016 |
| **Course Description** | : | |
| Objective of the Course: | : | This course is to provide the ability to design console based, GUI based and web based applications. Students will also be able to understand integrated development environment to create, debug and run multi-tier and enterprise-level applications. |
| List of Modules | : | |
| I | : | Topics in core java include following<br>1. Language basics such as operators , keywords , basic syntax etc.,<br>2. Methods and datatypes<br>3. OOPS concepts<br>4. Collection framework<br>5. Generics<br>6. Exception Handling<br>7. Multi threading<br>8. AWT and Swing |
| II | : | Topics in advance java include following.<br>1. JDBC<br>2. Servlets<br>3. JSP<br>4. Beans<br>5. EJB<br>6. Web Services |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date:18.02.2016

**A brief report of the Course**

A Software Implementation Training program is held during 8/1/2016 – 16/2/2016 on "**Advanced Java Programming**" for III and IV B.Tech students in MB 210 computer lab II from 04-06 PM .

Dr T. Nedunchezhian, Prof, CSE-Dept, Sri B. Peda Narayana, Asst.Prof, CSE- Dept., and Miss A. Haritha, Asst.Prof, CSE- Dept., has given excellent training to the students with various practical examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
**Department of Computer Science and Engineering**

**CIRCULAR**

Date: 25/02/2016

This is to inform for all the II, III & IV B. Tech students that department is decided to conduct value added course "**Python Programming**" other than the curriculum for enhancing the technical skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the course and faculty coordinators will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for improving the technical skills. The students those who are interested can give their names to the following faculty members.

Sri N. Suresh Babu - Asst.Prof., Dept of CSE
Smt P. Gnaneswari - Asst.Prof., Dept of CSE

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA
# (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 25.02.2016

| | | |
|---|---|---|
| Name of the of Course | : | Python Programming |
| Coordinator | : | Dr. G. Amrithayogam |
| Faculty Coordinator | : | Sri. N. Suresh Babu<br>Smt. P.Gnaneswari |
| Duration of the Course | : | 29/02/2016 to 19/03/2016 |
| **Course Description** | : | |
| Objective of the Course: | : | To know the basics of algorithmic problem solving, read and write simple Python programs, develop Python programs with conditionals and loops, define Python functions and call them. |
| List of Modules | : | |
| I | : | Algorithms, building blocks of algorithms , notation, algorithmic problem solving, simple str ategies for developing algorithms. |
| II | : | Python interpreter and interactive mo de; values and types; statements, tuple assignment, precedence of operators, comments; |
| III | : | Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); |
| IV | : | Iteration: state, while, for, break, continue, pass; Fruitful functions: return values, parameters. |

| | | |
|---|---|---|
| V | : | Strings: string slices, immutability, string functions and methods, string module; Lists as arrays . |
| VI | : | Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; |
| VII | : | Dictionaries: operations and methods; advanced list processing, Illustrative programs: selection sort, insertion sort, mergesort, histogram. |
| VIII | | Files and exception: text files, reading and writing files, format operator; handling exceptions, modules, packages; |
| Outcome of the Course | : | Upon completion of the course, students will be able to -- Develop algorithmic solutions to simple computational problems, Read, write, execute by hand simple Python programs, Structure simple Python programs for solving problems, Decompose a Python program into functions, Represent compound data using Python lists, tuples, dictionaries, Read and write data from/to files in Python Programs. |

# K.S.R.M. College of Engineering - KADAPA
## (AUTONOMOUS)
### Department of Computer Science and Engineering

Date: 22/03/2016

**A brief report of the Course**:

A Workshop is held during 29/02/2016 to 19/03/2016 on "**Python Programming** " for II, III, &IV B.Tech Students in MB 210 Computer lab I From 04-06 PM (Everyday).

Dr. G. Amrithayogam, Prof, CSE Dept., has given excellent training to the students with various examples. Students have practiced programs and clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.

The Faculty Coordinator : Sri N. Suresh Babu, Asst,Prof, CSE-Dept.

Smt. P. Gnaneswari, Asst.Prof, CSE-Dept.

Head of the Department

# K.S.R.M. College of Engineering(AUTONOMOUS) - KADAPA.

## Department of Computer Science and Engineering

**CIRCULAR**

The following are the list of the value added courses for the academic year 2016-17.

| S. No. | B.Tech, Sem | Value Added Course | Course Duration | Coordinator | Faculty coordinators | Total No. of Students |
|---|---|---|---|---|---|---|
| 1 | III &IV B.Tech | .Net technology | 6/09/2016 to 22/9/2016 | Dr K.G.S.Venkatesan | Sri G. Nagendra Babu<br>Sri S. Khaja Khizer | 70 |
| 2 | III and IV B.Tech | Android Application Development | 9/12/2016 to 06/1/2017 | Smt. S. Riyaz banu | Sri B. Peda Narayana<br>Sri N. Suresh Babu | 50 |
| 3 | IV B.Tech | Internet of Things | 13/2/2017 to 04/3/2017 | Dr. P. Prabhakaran | Sri M.Venkata Ramana<br>Miss. K. Jyothsna | 65 |
| 4 | II,III & IV B.Tech | English Communication Skills | 14/3/2017 to 1/4/2017 | Sri N. Basker Reddy | Sri N. Basker Reddy<br>Sri A. Anand Rao | 80 |
| 5 | III &IV B.Tech | Python Programming | 19/7/2017 to 6/8/2017 | K. Srinivasa Rao | Miss A. Haritha<br>Smt.B.Gouri | 70 |

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**

**Department of Computer Science and Engineering**

CIRCULAR

Date: 2/09/2016

**Sub:** Workshop on ".NET Technology" for CSE Students - Reg.

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It is inform all the students that college is going to conduct Workshop on ".NET Technology" from 06/09/2016 to 22/9/2016 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 04/09/2016.

**Co-coordinators:** Sri G. Nagendra Babu, Asst..Prof, Dept of CSE
Sri S. Khaja Khizer,Asst..Prof, Dept of CSE

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA
# (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 2/09/2016

| | | |
|---|---|---|
| Name of the of Course | : | .NET TECHNOLOGY |
| Coordinator | : | Dr K.G.S.Venkatesan |
| Faculty Coordinator | : | Sri G. Nagendra Babu<br>Sri S. Khaja Khizer |
| Duration of the Course | : | 06/09/2016 to 22/9/2016 |
| **Course Description** | : | |
| Objective of the Course: | : | .Net is a framework that provides programming guidelines that can be used to develop a wide range of applications from web to mobile to windows-based application. |
| List of Modules | : | |
| I | : | Introduction to the .NET initiative and the .NET platform |
| II | : | Code Management |
| III | : | Object oriented programming concepts |
| IV | : | Error and Exception handling |
| V | : | Using controls and components for designing application. |
| VI | : | Design web application using ASP.net |
| Outcome of the Course | : | 1. Understand the basics of VB.NET&ASP.NET<br>2. Understand the concept of error and exception handling .<br>3. Understand the OOPS Concepts. |

# K.S.R.M. College of Engineering - KADAPA

## (AUTONOMOUS)

## Department of Computer Science and Engineering

Date:25.09.16

**A brief report of the Course**

A Software Implementation Training program is held during 06/09/2016 to 22/9/2016 on " .Net Technology " for III and IV B.Tech students in MB 210 computer lab I from 04-06 PM .

Dr K.G.S.Venkatesan, Prof, CSE- Dept., has given excellent training to the students with various practical examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Sri G. Nagendra Babu, Asst.Prof, CSE- Dept.,

Sri S. Khaja Khizer , Asst.Prof, CSE Dept.

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

**CIRCULAR**

Date: 04.12.2016

It is inform all the students that college is going to conduct Workshop on "Android Application Development" from 09/12/2016 to 06/1/2017 (Every day at 04.00 PM to 06:00PM).The students those who are interested to participate in the above workshop may register their names with the following staff on or before 06.12.2016.

Sri B. Peda Narayana, Asst. Prof, Dept of CSE

Sri N. Suresh Babu, Asst. Prof, Dept of CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA
# (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 04.12.2016

| | | |
|---|---|---|
| Name of the of Course | : | Android Application Development |
| Coordinator | : | Smt S. Riyaz Banu, Asst. Prof, Dept of CSE |
| Faculty Coordinator | : | Sri B. Peda Narayana, Asst. Prof, Dept of CSE<br>Sri N. Suresh Babu, Asst. Prof, Dept of CSE |
| Duration of the Course | : | 09/12/2016 to 06/1/2017 |
| **Course Description** | : | |
| Objective of the Course: | : | Android Application Development course is designed to quickly get you up to speed with writing apps for Android devices. The student will learn the basics of Android platform and get to understand the application lifecycle. |
| List of Modules | : | |
| I | : | Programming Revision (Object Oriented Programming Concepts & Java fundamental) |
| II | : | Android : Activities , Content Providers , Intents , Services ,Storage, Network, Multimedia , GPS , Phone Services , XML Layouts , widgets , permission , Sensor Manager - Accelerometer, gyroscope etc. |
| III | : | . Threads, Animation, Refresher handler, Game Engine, Animated 2D Games, Google Play Store and Lot more. |
| IV | : | . Basics of Data Base, Introduction to SQ Lite and CRUD operations. |
| Outcome of the Course | : | By the end of the course, student will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 09.12.2017

**A brief report of the Course:**

A Software Implementation Training program is held during 09/12/2016 to 06/1/2017 on "Android Application Development" for III and IV B.Tech students in MB 210 computer lab II from 04-06 PM (Everyday).

Smt S. Riyaz Banu, Asst. Prof, CSE, Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their doubts.

All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Sri B. Peda Narayana, Asst. Prof, Dept of CSE

Sri N. Suresh Babu, Asst. Prof, Dept of CSE

Head of the Department

# K.S.R.M. College of Engineering - KADAPA
## (AUTONOMOUS)
## Department of Computer Science and Engineering

**CIRCULAR**

Date: 09.02.2017

This is to inform for all the IV B. Tech students that department is decided to conduct value added course on ***"Internet of Things"*** other than the curriculum for enhancing the technical skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday.

The detail list of the course, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technology (**Internet of Things**). The students those who are interested can give their names to the following faculty members.

Sri M. Venkata Ramana Asst.Prof, CSE dept.

Miss K. Jyothsna Asst. Prof, CSE dept.

Head of the Department

# K.S.R.M. College of Engineering - KADAPA
## (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 09.2.17

| | | |
|---|---|---|
| Name of the of Course | : | Internet of Things (IoT) |
| Coordinator | : | Dr. P. Prabhakaran |
| Faculty Coordinator | : | Sri M. Venkata Ramana<br>Miss K. Jyothsna |
| Duration of the Course | : | 13/2/2017 to 4/3/2017 |
| **Course Description** | : | |
| Objective of the Course: | : | To gain knowledge about IoT applications across various segments, skills required in building blocks and IoT product. |
| List of Modules | : | |
| I | : | Overview of IoT and High level Architecture and Setting up IoT work-flow |
| II | : | Programming with Advanced C / Embedded C |
| III | : | Micro-controller programming using Arduino, Programming with Python. |
| IV | : | Building IOT Applications using Raspberry Pi |
| V | : | IOT Cloud Infrastructure |
| VI | : | Performance and Security in IOT |
| Outcome of the Course | : | After completion of this course students to be equipped with a solid theoretical foundation systematic professional knowledge and strong practical skills in the fields of computer technology |

| | | |
|---|---|---|
| | | communications networks and IT that provides a wide range of applications in the Internet of Things. |

# K.S.R.M. College of Engineering - KADAPA
## (AUTONOMOUS)
## Department of Computer Science and Engineering

Date: 07.03.17

**A brief report of the Course:**

A Workshop is held during 13/02/2017 to 04/03/2017 on "*Internet of Things (IoT)* " for B.Tech IV Students in MB 110 Computer lab - 7 From 04-06 PM (Everyday).

Dr. P/ Prabhakaran , Prof, CSE - Dept., has given excellent training to the students with various practical examples. Students have clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.

The Faculty Coordinator : Sri M. Venkata Ramana, Asst.Prof., Dept of CSE

Miss. K. Jyothsna, Asst.Prof., Dept of CSE

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

**Department of Computer Science and Engineering**

**CIRCULAR**

Date: 10.03.2017

This is to inform for all the II, III & IV B. Tech students that department is decided to conduct value added course "***English communication skills***" other than the curriculum for enhancing the communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday.

The detail list of the course and faculty coordinators will be displayed in the notice board. In this regard, request all the students to come forward and take this as an opportunity for improving the communication skills. The students those who are interested can give their names to the concern faculty.

Sri A. Ananda Rao, Asst.Prof, Humanities dept.

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

***Department of Computer Science and Engineering***

Date: 10.03.2017

| | | |
|---|---|---|
| Name of the of Course | : | English Communication Skills |
| Coordinator | : | Sri N. Bhaskara Reddy |
| Faculty Coordinator | : | Sri A. Anand Rao |
| Duration of the Course | : | 14/3/17 to 1/4/17 |
| **Course Description** | : | |
| Objective of the Course: | : | Throughout this course, students will learn communication, problem solving and presentation skills as they relate to a more efficient and collaborative work environment. |
| List of Modules | : | |
| I | : | Creativity, Innovation, and Change and the Knowledge Economy. |
| II | : | Problem Solving in High-Performing Teams |
| III | : | Leadership in Engineering: Skills & Strategies |
| IV | : | Communication skills, Body language, Making Decisions. |
| V | : | Self Motivation Leadership Skills Team-Working Skills, Creativity and Problem Solving Skills, Time Management. |
| VI | : | Practicing a presentation: Importance, Techniques and feedback |
| Outcome of the Course | : | After completion of this course students will be able to acquire knowledge in personality development, time management, leadership qualities and skill development. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of **Computer Science and Engineering**

Date: 4/4/2017

**A brief report of the Course**:

A Workshop is held during 14/3/17 to 1/4/17 on " **English Communication Skills**" for B.Tech Students in MB 301 From 04-06 PM (Everyday).

Sri N. Bhaskara Reddy, Asso.Prof, Humanities and Sri A. Anand Rao, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

**Department of Computer Science and Engineering**

**CIRCULAR**

Date: 14/07/2017

This is to inform for all the III & IV B. Tech students that department is decided to conduct value added course "**Python Programming**" other than the curriculum for enhancing the technical skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the course and faculty coordinators will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for improving the technical skills. The students those who are interested can give their names to the following faculty members.

Miss A. Haritha - Asst.Prof., Dept of CSE

Smt B. Gouri - Asst.Prof., Dept of CSE

**Head of the Department**

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

**Department of Computer Science and Engineering**

Date: 14.07.2017

| | | |
|---|---|---|
| Name of the of Course | : | Python Programming |
| Coordinator | : | Sri K. Srinivasa Rao |
| Faculty Coordinator | : | Miss A. Haritha<br>Smt. B. Gouri |
| Duration of the Course | : | 19/07/2017 to 06/08/2017 |
| **Course Description** | : | |
| Objective of the Course: | : | To know the basics of algorithmic problem solving, read and write simple Python programs, develop Python programs with conditionals and loops, define Python functions and call them. |
| List of Modules | : | |
| I | : | Algorithms, building blocks of algorithms , notation,<br>algorithmic problem solving, simple strategies for developing algorithms. |
| II | : | Python interpreter and interactive mode; valu es and types; statements, tuple assignment, precedence of operators, comments; |
| III | : | Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); |
| IV | : | Iteration: state, while, for, break, continue, pass; Fruitful functions: return values, parameters. |
| V | : | Strings: string slices,<br>immutability, string functions and<br>methods, string module; Lists as arrays. |
| VI | : | Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; |

| | | |
|---|---|---|
| VII | : | Dictionaries: operations and methods; advanced list processing, Illustrative programs: selection sort, insertion sort, mergesort, histogram. |
| VIII | | Files and exception: text files, reading and writing files, format operator; handling exceptions, modules, packages; |
| Outcome of the Course | : | Upon completion of the course, students will be able to -- Develop algorithmic solutions to simple computational problems, Read, write, execute by hand simple Python programs, Structure simple Python programs for solving problems, Decompose a Python program into functions, Represent compound data using Python lists, tuples, dictionaries, Read and write data from/to files in Python Programs. |

# K.S.R.M. College of Engineering - KADAPA

(AUTONOMOUS)

Department of Computer Science and Engineering

Date: 10/08/2017

**A brief report of the Course**:

A Workshop is held during 19/07/2017 to 06/08/2017on "**Python Programming** " for B.Tech III, &IV Students in MB 210 Computer lab I From 04-06 PM (Everyday).

Sri K. Srinivasa Rao Asso. Prof, CSE Dept., has given excellent training to the students with various examples. Students have practiced programs and clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.

The Faculty Coordinator : Miss A. Haritha, Asst,Prof, CSE-Dept.

Smt. B. Gouri, Asst.Prof, CSE-Dept.

Head of the Department

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CE**

CIRCULAR

Date: 01/09/2018

**Sub:** Workshop on "**Computer Aided Steel Structures**" from 04.09.2018 To 22.09.2018 - Reg.

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It is informed all the students that college is going to conduct Workshop on "**Computer Aided Steel Structures"** Steel Structures" from 04.09.2018 To 22.09.2018 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 2.09.2018.

**Co-coordinators:**

1. Sri.V. V. Prasad Asst Professor in CE

2. Sri.V.Ramesh Babu AsstProfessor in CE

Sd/-xxxxx
PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CE**

**Workshop on "Computer Aided Steel Structures"**
**(Value Added Course)**

**VAC Coordinator: Dr.G.Sreenivasa Reddy HoD,Dept of CE**

**VAC Instructors:** 1. Sri.V. V. Prasad Asst Professor in CE

2. Sri.V. Ramesh Babu Asst Professor in CE

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| **Computer Aided Steel Structures** | B.Tech VII Sem | 52 | 04/09/2018 To 22/09/2018 |

**Note:** Timings 4PM to 6PM

**Prerequisite:**

1. If you already know about structures, steel design should be easy to pick up.
2. Basics knowledge about structural elements.

**Course Objectives:**

- This course is to provide familiar with behavior and design of structural elements and their connections in accordance with the latest code of practice IS 800-2007 based on limit state design. Students able to understand limit state design of fundamental aspects, analysis and design of steel structural elements.

**About Computer Aided Steel Structures Steel Structures:** A steel structure is an assemblage of a group of members (elements) expected to sustain their share of applied forces and to transfer them safely to the ground. Depending on the orientation of the member in the structure and its structural use the member is subjected to forces, axial, bendinding or torsion or a combination there off . For building steel structrues, the designer is normally compelled to use. Standard rolled steel sections.

Fortunately, the variety of steel section available is so great that any desired structural effect can be achieved in steel.

**Topics to be covered**:

1. Plastic Analysis
2. Welded joints
3. Design of beams
4. Stiffened and Un stiffened seated connections
5. Column bases and Gusseted Bases

**Course outcomes:** By the end of this course, the student will be able to

1. Understand the basic knowledge about Rolled steel sections and tension and compression members
2. Understands the design of various column sections like Lacings and Battens.

**Assessment:**

1. Every student has to give periodic tests consisting of Programming tasks and Objective Questions.

2. At the end of the Course each student will give a presentation on a topic covered in the course.

# KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

**Department of CE**

CIRCULAR

Date: 01/10/2017

**Sub:** Workshop on "**Computer Applications in Concrete Technology**" from 03.10.2017 To 22.10.2017 - Reg.

@@@

It is informed all the students that college is going to conduct Workshop on "**Computer Applications in Concrete Technology**" from 03.10.2017 To 22.10.2017 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 2.10.2017.

**Co-coordinators:**

1. Dr.T.kiran Kumar Professor in CE

2. Dr.V.Giridhar Professor in CE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CE**

**Workshop on "Computer Applications in Concrete Technology"**
**(Value Added Course)**

**VAC Coordinator: Dr.G.Sreenivasa Reddy HoD,Dept of CE**

**VAC Instructors:** 1. Dr.T.kiran Kumar Professor in CE

2. Dr.V.Giridhar Professor in CE

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| **Computer Applications in Concrete Technology** | B.Tech VII Sem | 40 | 03/10/2017 To 22/10/2017 |

**Note:** Timings 4PM to 6PM

**Prerequisite:**

3. If you already know about Building Construction Materials, Concrete Technology should be easy to pick up.

4. Basics knowledge about cement & concrete structures.

**Course Objectives:**

- This course is to provide the ability to workability, durability and other factors influencing the mix proportions as they are understood now are comparitively recent origin. Students will able to understand mix design methods and factors influencing the mix proportions.

**About Computer Applications in Concrete Technology:** Concrete is a widely used structural material consisting essentially of a binder and mineral filler. It has the unique distinction of being the only construction material manufauctured on the site. Whereas other materials are merely shaped to use at the work site, good or bad concrete made from the same descrete materials like grains of sand,

gravel or piece of crushed rock and the innumerable fine particles of cement powder mixed with water.

**Topics to be covered**:

6. Principles of Concrete mix Design
7. Material requirements
8. Workability of fresh concrete
9. Statistical quality qontrol of concrete
10. Strength and durability of concrete
11. Design of low and medium strength concrete mixes
12. Design of concrete mixes according to american concrete institute standards
13. Design of concrete mixes based on surface and angularity index of aggregate

**Course outcomes:** By the end of this course, the student will be able to

3. Understand the basic knowledge about building construction materials
4. Understands the mix design methods according to IS codes

**Assessment:**

3. Every student has to give periodic tests consisting of Programming tasks and Objective Questions.
4. At the end of the Course each student will give a presentation on a topic covered in the course.

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 03.07.17

This is to inform for all the students (I, III, V, VII Semester) that department is decided to conduct value added courses other than the curriculum for enhancing the technical, soft and communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the courses, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technologies. The students those who are interested can give their names to the concern faculty.

Sd/-xxxxx
Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 05.12.17

This is to inform for all the B. Tech students (II to VIII Semester) that department is decided to conduct value added courses other than the curriculum for enhancing the technical, soft and communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday for II to VI semester students. But, for VIII Semester students the course will be only on Friday and Saturday from 9.00 to 4.00pm. The detail list of the courses, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technologies. The students those who are interested can give their names to the concern faculty.

Sd/-xxxxx
Head of the Department

K.S.R.M. College of Engineering - KADAPA.
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 05.07.17

The following are the list of the value added courses for the academic year 2017-18.

| S. No. | Sem/ Sec | Value Added Course | Course Duration | Faculty Coordinator | Resource Person | Total No. of Contact Hours |
|---|---|---|---|---|---|---|
| 1 | III | Effective Technical Communication | 05.07.17 - 22.07.11 | Sri K. Eswar Reddy | Sri K. Vijaya Bhaskara Reddy, Sri K. Eswar Reddy | 30 |
| 2 | V (A& B) | Internet of Things (IoT) | 11.09.17 - 30.09.17 | Sri N. Sidhik | Sri T. Kishore Kumar, Sri N. Sidhik | 36 |
| 3 | VII (A & B) | ETAP/PSCAD | 04.12.17 - 23.12.17 | Dr. K. Amaresh | Dr. K. Amaresh, Sri K. Rama Mohan Reddy | 34 |
| 4 | II | Soft Skills | 06.03.18 - 23.03.18 | Sri A. Anand Rao | Sri N. Bhaskara Reddy, Sri A. Anand Rao | 30 |
| 5 | IV | Python Programming | 05.02.18 - 24.02.18 | Sri G. Hussain Basha | Sri P. Durga Prasad, Sri G. Hussain basha | 34 |
| 6 | VI (A& B) | MATLAB/SIMULINK | 05.02.18 - 24.02.18 | Sri K. Kalyan Kumar | Sri K. Kalyan Kumar, Smt. Saleha Tabassum | 30 |
| 7 | VIII (A& B) | LABVIEW | 15.12.17 - 30.12.17 | Sri G. Suneel Kumar | Sri M. Bhaskara Reddy, Sri G. Suneel Kumar | 36 |

Sd/-xxxxx
Course Coordinator

Sd/-xxxxx
Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering
Date:03.07.17

| | | |
|---|---|---|
| Name of the of Course | : | Effective Technical Communication |
| Resource Person | : | Sri K. Vijaya Bhaskara Reddy |
| Faculty Coordinator | : | Sri K. Eswar Reddy |
| Duration of the Course | : | 05.07.17 - 22.07.17 |
| **Course Description** | : | |
| Objective of the Course: | : | To enable students to inculcate proficiency in professional communication to meet the growing demand in the field of Global communication. To acquire ability to speak effectively in real life situations, to improve grammatical and communicative skills. |
| List of Modules | : | |
| I | : | Meaning and Definition – Process – Functions–Objective – Importance- Types and Communication barriers. |
| II | : | Technical writing Process, Writing drafts and revising, Collaborative creating indexes. |
| III | : | Editing strategies, introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing. |
| IV | : | Self assessment, Personal goal setting, career planning, Managing Time. |
| V | : | Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity. |
| VI | : | Public speaking, Group discussion, Oral presentation, Interviews, Graphic presentation, Presentation aids, Personality Development. |
| VII | : | Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Complex problem solving, Creativity. |
| Outcome of the Course | : | After completion of the course students able learn about<br>Technical writing, Self assessment, Public speaking, Group discussion, Oral presentation, Interviews and Rapid reading. |

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K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 26.07.17

**A brief report of the Course**:

A Workshop is held during 05 - 22 July-2017 on " Effective Technical Communication" for B.Tech III Sem Students in SJ 107 from 04-06 PM (Everyday).
Sri K. Vijaya Bhaskara Reddy, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.
The Faculty Coordinator : Sri.K.Eswar Reddy,Asst.Prof.,Humanities
The student Coordinators are : Sai Harish Kumar
: M.Bhavya

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 07.09.17

| | | |
|---|---|---|
| Name of the of Course | : | Internet of Things (IoT) |
| Resource Person | : | Sri T. Kishore Kumar |
| Faculty Coordinator | : | Sri N. Sidhik |
| Duration of the Course | : | 11.09.17-30. 09.17 |
| **Course Description** | : | |
| Objective of the Course: | : | To gain knowledge about IoT applications across various segments, skills required in building blocks and IoT product. |
| List of Modules | : | |
| I | : | Overview of IoT and High level Architecture and Setting up IoT work-flow |
| II | : | Programming with Advanced C / Embedded C |
| III | : | Micro-controller programming using Arduino,Programming with Python. |
| IV | : | Building IoT Applications using Raspberry Pi |
| V | : | IoT Cloud Infrastructure |
| VI | : | Performance and Security in IoT |
| Outcome of the Course | : | After completion of this course students to be equipped with a solid theoretical foundation systematic professional knowledge and strong practical skills in the fields of computer technology communications networks and IT that provides a wide range of applications in the Internet of Things. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 05.10.17

**A brief report of the Course**:

A Workshop is held during 11 - 30 September -2017 on "Internet of Things (IoT) " for B.Tech IV Sem Students in PG -116 from 04-06 PM (Everyday).
SriT.KIshore Kumar, Asst.Prof,EEE , Dept., has given excellent training to the students with various practical examples. Students has clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Sri.N.Siddik, Asst.Prof.,EEE Dept.
The student Coordinators are : K.Sai Krishna
: A.Tejaswini
: N.Shivani

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 01.12.17

| | | |
|---|---|---|
| Name of the of Course | : | ETAP/PSCAD |
| Resource Person | : | Sri K. Rama Mohan Reddy |
| Faculty Coordinator | : | Dr. K. Amaresh |
| Duration of the Course | : | 04.12.17-23.12.17 |
| **Course Description** | : | |
| Objective of the Course: | : | The objective is to help new users to become familiar with some of the basic PSCAD tools and ETAP. |
| List of Modules | : | |
| I | : | Introduction ,and how to create a new project in ETAP,how to load the existing project ,get to know the toolbar. |
| II | : | Create your one line diagram components using alignment option<br>Composite Networks , Creating a template and importing it to one line diagram. |
| III | : | A few basic components in bars on right of screen |
| IV | : | Use of the PSCAD menus and tools, Master Library, Inserting components and wiring and entering data. |
| V | : | Protective Device Coordination part I |
| VI | : | Protective Device Coordination Part II |
| Outcome of the Course | : | Under the completion of this course students will be able to learn how to take commands and draw the various networks, use of menus ,tools and writing and entering data using PSCAD. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 27.12.17

**A brief report of the Course**:

A Software Implementation Training program is held during 04 - 23 December -2017 on "ETAP/PSCAD" for B.Tech VII Sem Students in SJ 115 From 04-06 PM (Everyday).
Sri K. Rama Mohan Reddy, Asso.Prof, EEE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Dr. K. Amaresh, Prof., EEE-Dept.
The student Coordinators are : M. Manoj Kumar
: D.Dhanunjaye

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 01.03.18

| | | |
|---|---|---|
| Name of the of Course | : | Soft Skills |
| Resource Person | : | Sri A. Anand Rao |
| Faculty Coordinator | : | Sri N. Bhaskara Reddy |
| Duration of the Course | : | 05.03.18 - 23.03.18 |
| **Course Description** | : | |
| Objective of the Course: | : | Throughout this course, students will learn communication, problem solving and presentation skills as they relate to a more efficient and collaborative work environment. |
| List of Modules | : | |
| I | : | Creativity, Innovation, and Change and the Knowledge Economy. |
| II | : | Problem Solving in High-Performing Teams |
| III | : | Leadership in Engineering: Skills & Strategies |
| IV | : | Communication skills, Body language, Making Decisions. |
| V | : | Self Motivation Leadership Skills Team-Working Skills, Creativity and Problem Solving Skills, Time Management. |
| VI | : | Practicing a presentation: Importance, Techniques and feedback |
| Outcome of the Course | : | After completion of this course students will be able to acquire knowledge in personality development, time management, leadership qualities and skill development. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 28.03.18

**A brief report of the Course**:

A Personality Development program is held during 05 – 23 March -2018 on "Soft Skills" for B.Tech II Sem Students in SJ 105 From 04-06 PM (Everyday).
Sri A. Anand Rao, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. Students have participated in Group Discussions , Debate competitions held during the course duration.
All the participants are satisfied with his teaching methodologies and students have learned various personality development skills.
The Faculty Coordinator : Sri N. Bhaskara Reddy,Asso.Prof,Humanities.
The student Coordinators are : G.Sasidher
: M.Sandeep
: S.Tabassum

Sd/-xxxxx

Head of The Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 02.02.2018

| | | |
|---|---|---|
| Name of the of Course | : | Python Programming |
| Resource Person | : | Sri P. Durga Prasad |
| Faculty Coordinator | : | Sri G. Hussain Basha |
| Duration of the Course | : | 05.02.18- 24.02.18 |
| **Course Description** | : | |
| Objective of the Course: | : | To know the basics of algorithmic problem solving, read and write simple Python programs, develop Python programs with conditionals and loops, define Python functions and call them. |
| List of Modules | : | |
| I | : | Algorithms, building blocks of algorithms , notation, algorithmic problem solving, simple strategies for developing algorithms. |
| II | : | Python interpreter and interactive mode; values and types; statements, tuple assignment, precedence of operators, comments; |
| III | : | Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); |
| IV | : | Iteration: state, while, for, break, continue, pass; Fruitful functions: return values, parameters. |
| V | : | Strings: string slices, immutability, string functions and methods, string module; Lists as arrays. |
| VI | : | Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; |
| VII | : | Dictionaries: operations and methods; advanced list processing, Illustrative programs: selection sort, insertion sort, mergesort, histogram. |
| VIII | | Files and exception: text files, reading and writing files, format operator; handling exceptions, modules, packages; |
| Outcome of the Course | : | Upon completion of the course, students will be able to -- Develop algorithmic solutions to simple computational problems, Read, write, execute by hand simple Python programs, Structure simple Python programs for solving problems, Decompose a Python program into functions, Represent compound data using Python lists, tuples, dictionaries, Read and write data from/to files in Python Programs. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 26.02.18

**A brief report of the Course**:

A Workshop is held during 05 - 24 February-2018 on "Python Programming " for B.Tech IV Sem Students in SJ 115 From 04-06 PM (Everyday).
Sri P. Durga Prasad, Asst.Prof, EEE, Dept., has given excellent training to the students with various examples. Students have practiced programs and clarified their droughts.
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.
The Faculty Coordinator : Sri G. Hussain Basha, Asst,Prof, EEE-Dept.
The student Coordinators are : S. Riyazuddin
: S. Ravi Teja

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 05.02.18

| | | |
|---|---|---|
| Name of the of Course | : | MATLAB/SIMULINK |
| Resource Person | : | Sri K. Kalyan Kumar |
| Faculty Coordinator | : | Smt. Saleha Tabassum |
| Duration of the Course | : | 07.02.18-24.02.18 |
| **Course Description** | : | |
| Objective of the Course: | : | To learn the basics of MATLAB commands, code generation of multiple software components. Prepare and optimize MATALB code for generation and the use of Simulink platform for design various networks. |
| List of Modules | : | |
| I | : | Basic features, script M-files, code cells, arrays - creation, addressing and array operations; multi dimensional arrays. |
| II | : | Arithmetic & Logical operators, control flow - if, if-else, for, while, switch case constructions; and functions. |
| III | : | Matrix algebra and solutions to systems of linear equations, polynomials,Numerical integration, numerical differentiation. |
| IV | : | Matlab graphics and Numerical techniques:<br>Two dimensional graphics, three dimensional graphics, interpolation, curve fitting. |
| V | : | Symbolic Mathematics:<br>Symbolic algebra, equation solving, differentiation and integration . |
| VI | : | Writing programs with logic and flow control Writing functions Control statement, Programming Conditional Statement Programming ,Examples |
| VII | : | Introduction to Simulink Environment & Interface Study of Library Circuit Oriented Designs and Equation Oriented Design Model Subsystem . |
| VIII | | Application MATLAB Programming ,Automating commands with scripts. |
| Outcome of the Course | : | Under the completion of this course students will be able to understand the basic commands in writing MATLAB programs and designing various networks using Simulink. Prepare and optimize MATALB code for generation and the use of Simulink platform for design. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 27.02.18

**A brief report of the Course**:

A Software Implementation Training program is held during 07 - 23 Feb -2018 on "MATLAB/SIMULINK" for B.Tech VI Sem Students in SJ 115 From 04-06 PM (Everyday).
Sri K. Kalyan Kumar, Asst.Prof, EEE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Smt.Saleha Tabassum, Asst.Prof, EEE , Dept.
The student Coordinators are : K.Rushikesh Reddy
: K.Pranay
: P.Vasavi

Sd/-xxxxx

Head of The Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 13.12.17

| | | |
|---|---|---|
| Name of the of Course | : | LAB VIEW |
| Resource Person | : | Sri G. Suneel Kumar |
| Faculty Coordinator | : | Sri M. Bhaskara Reddy |
| Duration of the Course | : | 15.12.17-30.12.17 |
| **Course Description** | : | |
| Objective of the Course: | : | This course is used in Interfacing a computer to various instruments for data acquisition and instrument control using a state-of-the-art software platform. |
| List of Modules | : | |
| I | : | Introduction, basic Definitions, necessity of programming and execution methods. |
| II | : | Designing the Software: How to start up the Front panel designing and working environment. Explanations of Controls Palette, and Block Diagram and its working. |
| III | : | Basic Programming: How to use Numerical functions Designing of Boolean operations, Comparator applications Exercises in basic programming. |
| IV | : | Programming Loops: About For loops, How to use Shift registers, While loop designing, Flat Sequences, Applications based on Loops. |
| V | : | Structures: Case Structure: Definition and designing method, Event Structure : Definition and designing method, Working models in structures. |
| VI | : | Data Handling: Introduction of String, Arrays and Clusters, Working with string functions, About arrays and designing. |
| Outcome of the Course | : | Using LABVIEW Students can able to Plot data on the screen, Saving of data to a file. Saved data must be readable by a spreadsheet program .Emphasis on the practical aspects of interfacing a computer to various instruments including timing issues, real-time data acquisition and instrument control, instrument status, and acquisition speed |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 02.01.18

**A brief report of the Course**:

A Software Implementation Training program is held during 15 – 30 December -2017 on "LABVIEW" for B.Tech VIII Sem Students in PG-111
from 09-04 PM (Every Friday and Saturday).
Sri G. Suneel Kumar, Asst.Prof, ECE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Sri M.Bhaskar REddy, Asso.Prof, EEE ,Dept.
The student Coordinators are : P.Nishanth
: S.Deepthi Sree

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 09.07.18

This is to inform for all the B. Tech students (III to VII Semester) that department is decided to conduct value added courses other than the curriculum for enhancing the technical, soft and communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday. The detail list of the courses, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technologies. The students those who are interested can give their names to the concern faculty.

Sd/-xxxxx
Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 05.12.18

This is to inform for all the B. Tech students (II to VIII Semester) that department is decided to conduct value added courses other than the curriculum for enhancing the technical, soft and communication skills effectively. The course will run after working hours from 4.00 to 6.00pm from Monday to Friday for II to VI semester students. But, for VIII Semester students the course will be only on Friday and Saturday from 9.00 to 4.00pm. The detail list of the courses, resource person and faculty coordinators for each course will be displayed in the notice board as early as possible. In this regard, request all the students to come forward and take this as an opportunity for learning the new technologies. The students those who are interested can give their names to the concern faculty.

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA.
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

**CIRCULAR**

Date: 11.07.18

The following are the list of the value added courses for the academic year 2018-19.

| S. No. | Sem/Sec | Value Added Course | Course Duration | Faculty Coordinator | Resource Person | Total No. of Contact Hours |
|---|---|---|---|---|---|---|
| 1. | III | Effective Technical Communication | 10.09.18-29.09.18 | Sri K. Eswar Reddy | Sri K. Vijaya Bhaskara Reddy, Sri K. Eswar Reddy | 36 |
| 2 | V (A&B) | Internet of Things (IoT) | 10.09.18-29.09.18 | Sri N. Sidhik | Sri T. Kishore Kumar, Sri N. Sidhik | 36 |
| 3 | VII (A & B) | ETAP/PSCAD | 03.12.18-21.12.18 | Dr. K. Amaresh | Dr. K. Amaresh, Sri K. Rama Mohan Reddy | 32 |
| 4 | II | Soft Skills | 06.03.19-23.03.19 | Sri A. Anand Rao | Sri N. Bhaskara Reddy, Sri A. Anand Rao | 30 |
| 5 | IV | Python Programming | 04.02.19-23.02.19 | Sri G. Hussain Basha | Sri P. Durga Prasad, Sri G. Hussain Basha | 34 |
| 6 | VI (A&B) | MATLAB/SIMULINK | 04.02.19-21.02.19 | Sri K. Kalyan Kumar | Sri K. Kalyan Kumar, Dr. T. Mariprasath | 30 |
| 7 | VIII (A&B) | LABVIEW | 14.12.18-29.12.18 | Sri G. Suneel Kumar | Sri M. D. Mahaboob Pasha, Sri G. Suneel Kumar | 36 |

Sd/-xxxxx
Course Coordinator

Sd/-xxxxx
Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering
Date: 06.09.18

| | | |
|---|---|---|
| Name of the of Course | : | Effective Technical Communication |
| Resource Person | : | Sri K. Vijaya Bhaskara Reddy |
| Faculty Coordinator | : | Sri K. Eswar Reddy |
| Duration of the Course | : | 10.09.18 - 29.09.18 |
| **Course Description** | : | |
| Objective of the Course: | : | To enable students to inculcate proficiency in professional communication to meet the growing demand in the field of Global communication. To acquire ability to speak effectively in real life situations, to improve grammatical and communicative skills. |
| List of Modules | : | |
| I | : | Meaning and Definition – Process – Functions–Objective – Importance- Types and Communication barriers. |
| II | : | Technical writing Process, Writing drafts and revising, Collaborative creating indexes. |
| III | : | Editing strategies, introduction to advanced technical communication, Usability, Human factors, Managing technical communication projects, time estimation, Single sourcing. |
| IV | : | Self assessment, Personal goal setting, career planning, Managing Time. |
| V | : | Personal memory, Rapid reading, Taking notes; Complex problem solving; Creativity. |
| VI | : | Public speaking, Group discussion, Oral presentation, Interviews, Graphic presentation, Presentation aids, Personality Development. |
| VII | : | Role and responsibility of engineer, Work culture in jobs, Personal memory, Rapid reading, Complex problem solving, Creativity. |
| Outcome of the Course | : | After completion of the course students able learn about<br>Technical writing, Self assessment, Public speaking, Group discussion, Oral presentation, Interviews and Rapid reading. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 25.09.18

**A brief report of the Course**:

A Workshop is held during 10 -29 Sep-2018 on " Effective Technical Communication" for B.Tech III Sem Students in SJ 107 from 04-06 PM (Everyday).
Sri K. Vijaya Bhaskara Reddy, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.
The Faculty Coordinator : Sri.K.Eswar Reddy,Asst.Prof.,Humanities
The student Coordinators are : Sai Harish Kumar
: M.Bhavya

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 05.09.18

| | | |
|---|---|---|
| Name of the of Course | : | Internet of Things (IoT) |
| Resource Person | : | Sri T. Kishore Kumar |
| Faculty Coordinator | : | Sri N. Sidhik |
| Duration of the Course | : | 10.09.18-29.09.18 |
| **Course Description** | : | |
| Objective of the Course: | : | To gain knowledge about IoT applications across various segments, skills required in building blocks and IoT product. |
| List of Modules | : | |
| I | : | Overview of IoT and High level Architecture and Setting up IoT work-flow |
| II | : | Programming with Advanced C / Embedded C |
| III | : | Micro-controller programming using Arduino,Programming with Python. |
| IV | : | Building IoT Applications using Raspberry Pi |
| V | : | IoT Cloud Infrastructure |
| VI | : | Performance and Security in IoT |
| Outcome of the Course | : | After completion of this course students to be equipped with a solid theoretical foundation systematic professional knowledge and strong practical skills in the fields of computer technology communications networks and IT that provides a wide range of applications in the Internet of Things. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 24.09.18

**A brief report of the Course**:

A Workshop is held during 10 - 29 September -2018 on "Internet of Things (IoT) " for B.Tech IV Sem Students in PG -116 from 04-06 PM (Everyday).
SriT.Kishore Kumar, Asst.Prof,EEE , Dept., has given excellent training to the students with various practical examples. Students has clarified their droughts. All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Sri.N.Siddik, Asst.Prof.,EEE Dept.
The student Coordinators are : V.Sai Krishna
: A.Tejaswini
: N.Shivani

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 30.11.19

| | | |
|---|---|---|
| Name of the of Course | : | ETAP/PSCAD |
| Resource Person | : | Sri K. Rama Mohan Reddy |
| Faculty Coordinator | : | Dr. K. Amaresh |
| Duration of the Course | : | 03.12.18-21.12.18 |
| **Course Description** | : | |
| Objective of the Course: | : | The objective is to help new users to become familiar with some of the basic PSCAD tools and ETAP. |
| List of Modules | : | |
| I | : | Introduction ,and how to create a new project in ETAP,how to load the existing project ,get to know the toolbar. |
| II | : | Create your one line diagram components using alignment option<br>Composite Networks , Creating a template and importing it to one line diagram. |
| III | : | A few basic components in bars on right of screen |
| IV | : | Use of the PSCAD menus and tools, Master Library, Inserting components and wiring and entering data. |
| V | : | Protective Device Coordination part I |
| VI | : | Protective Device Coordination Part II |
| Outcome of the Course | : | Under the completion of this course students will be able to learn how to take commands and draw the various networks, use of menus ,tools and writing and entering data using PSCAD. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 28.12.18

**A brief report of the Course**:

A Software Implementation Training program is held during 03 - 21 December -2018 on "ETAP/PSCAD" for B.Tech VII Sem Students in SJ 115 From 04-06 PM (Everyday).
Sri K. Rama Mohan Reddy, Asso.Prof, EEE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Dr. K. Amaresh, Prof., EEE-Dept.
The student Coordinators are : M. Manoj Kumar
: D.Dhanunjaye

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 01.03.19

| | | |
|---|---|---|
| Name of the of Course | : | Soft Skills |
| Resource Person | : | Sri A. Anand Rao |
| Faculty Coordinator | : | Sri N. Bhaskara Reddy |
| Duration of the Course | : | 06.03.19-23.03.19 |
| **Course Description** | : | |
| Objective of the Course: | : | Throughout this course, students will learn communication, problem solving and presentation skills as they relate to a more efficient and collaborative work environment. |
| List of Modules | : | |
| I | : | Creativity, Innovation, and Change and the Knowledge Economy. |
| II | : | Problem Solving in High-Performing Teams |
| III | : | Leadership in Engineering: Skills & Strategies |
| IV | : | Communication skills, Body language, Making Decisions. |
| V | : | Self Motivation Leadership Skills Team-Working Skills, Creativity and Problem Solving Skills, Time Management. |
| VI | : | Practicing a presentation: Importance, Techniques and feedback |
| Outcome of the Course | : | After completion of this course students will be able to acquire knowledge in personality development, time management, leadership qualities and skill development. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 28.03.19

**A brief report of the Course**:

A Personality Development program is held during 06 – 23 March -2019 on "Soft Skills" for B.Tech II Sem Students in SJ 105 From 04-06 PM (Everyday).
Sri A. Anand Rao, Asst.Prof, Humanities, Dept., has given excellent training to the students with various examples. Students have participated in Group Discussions , Debate competitions held during the course duration.
All the participants are satisfied with his teaching methodologies and students have learned various personality development skills.
The Faculty Coordinator : Sri N. Bhaskara Reddy, Asso.Prof,Humanities.
The student Coordinators are : K.Pavan Kumar
: A.Aruna

Sd/-xxxxx

Head of The Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 02.03.2019

| | | |
|---|---|---|
| Name of the of Course | : | Python Programming |
| Resource Person | : | Sri P. Durga Prasad |
| Faculty Coordinator | : | Sri G. Hussain Basha |
| Duration of the Course | : | 04.03.19-23.03.19 |
| **Course Description** | : | |
| Objective of the Course: | : | To know the basics of algorithmic problem solving, read and write simple Python programs, develop Python programs with conditionals and loops, define Python functions and call them. |
| List of Modules | : | |
| I | : | Algorithms, building blocks of algorithms , notation, algorithmic problem solving, simple strategies for developing algorithms. |
| II | : | Python interpreter and interactive mode; values and types; statements, tuple assignment, precedence of operators, comments; |
| III | : | Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); |
| IV | : | Iteration: state, while, for, break, continue, pass; Fruitful functions: return values, parameters. |
| V | : | Strings: string slices, immutability, string functions and methods, string module; Lists as arrays. |
| VI | : | Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; |
| VII | : | Dictionaries: operations and methods; advanced list processing, Illustrative programs: selection sort, insertion sort, mergesort, histogram. |
| VIII | | Files and exception: text files, reading and writing files, format operator; handling exceptions, modules, packages; |
| Outcome of the Course | : | Upon completion of the course, students will be able to -- Develop algorithmic solutions to simple computational problems, Read, write, execute by hand simple Python programs, Structure simple Python programs for solving problems, Decompose a Python program into functions, Represent compound data using Python lists, tuples, dictionaries, Read and write data from/to files in Python Programs. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 27.03.19

**A brief report of the Course**:

A Workshop is held during 04 - 23 February-2019 on "Python Programming " for B.Tech IV Sem Students in SJ 115 From 04-06 PM (Everyday).
Sri P. Durga Prasad, Asst.Prof, EEE, Dept., has given excellent training to the students with various examples. Students have practiced programs and clarified their droughts.
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop.
The Faculty Coordinator : Sri G. Hussain Basha, Asst,Prof, EEE-Dept.
The student Coordinators are : S.Mizba Saniya
: A.Ajith

Sd/-xxxxx

Head of the Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 01.02.19

| | | |
|---|---|---|
| Name of the of Course | : | MATLAB/SIMULINK |
| Resource Person | : | Dr.T.Mariprasath |
| Faculty Coordinator | : | Sri K. Kalyan Kumar |
| Duration of the Course | : | 04.02.19-21.02.19 |
| **Course Description** | : | |
| Objective of the Course: | : | To learn the basics of MATLAB commands, code generation of multiple software components. Prepare and optimize MATALB code for generation and the use of Simulink platform for design various networks. |
| List of Modules | : | |
| I | : | Basic features, script M-files, code cells, arrays - creation, addressing and array operations; multi dimensional arrays. |
| II | : | Arithmetic & Logical operators, control flow - if, if-else, for, while, switch case constructions; and functions. |
| III | : | Matrix algebra and solutions to systems of linear equations, polynomials,Numerical integration, numerical differentiation. |
| IV | : | Matlab graphics and Numerical techniques:<br>Two dimensional graphics, three dimensional graphics, interpolation, curve fitting. |
| V | : | Symbolic Mathematics:<br>Symbolic algebra, equation solving, differentiation and integration . |
| VI | : | Writing programs with logic and flow control Writing functions Control statement, Programming Conditional Statement Programming ,Examples |
| VII | : | Introduction to Simulink Environment & Interface Study of Library Circuit Oriented Designs and Equation Oriented Design Model Subsystem . |
| VIII | | Application MATLAB Programming ,Automating commands with scripts. |
| Outcome of the Course | : | Under the completion of this course students will be able to understand the basic commands in writing MATLAB programs and designing various networks using Simulink. Prepare and optimize MATALB code for generation and the use of Simulink platform for design. |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 25.02.19

**A brief report of the Course**:

A Software Implementation Training program is held during 04 - 21 Feb -2019 on
"MATLAB/SIMULINK" for B.Tech VI Sem Students in SJ 115 From 04-06 PM (Everyday).
Dr.T.Mariprasath,Asso.Prof EEE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator , Sri K. Kalyan Kumar, Asst.Prof, EEE , Dept.
The student Coordinators are : K.Veerendra
: R. Naveen
: C.Nagamunindra

Head of The Department

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 12.12.18

| | | |
|---|---|---|
| Name of the of Course | : | LAB VIEW |
| Resource Person | : | Sri.MD. Mahaboob Pasha |
| Faculty Coordinator | : | Sri G. Suneel Kumar |
| Duration of the Course | : | 14.12.18-29.12.18 |
| **Course Description** | : | |
| Objective of the Course: | : | This course is used in Interfacing a computer to various instruments for data acquisition and instrument control using a state-of-the-art software platform. |
| List of Modules | : | |
| I | : | Introduction, basic Definitions, necessity of programming and execution methods. |
| II | : | Designing the Software: How to start up the Front panel designing and working environment. Explanations of Controls Palette, and Block Diagram and its working. |
| III | : | Basic Programming: How to use Numerical functions Designing of Boolean operations, Comparator applications Exercises in basic programming. |
| IV | : | Programming Loops: About For loops, How to use Shift registers, While loop designing, Flat Sequences, Applications based on Loops. |
| V | : | Structures: Case Structure: Definition and designing method, Event Structure : Definition and designing method, Working models in structures. |
| VI | : | Data Handling: Introduction of String, Arrays and Clusters, Working with string functions, About arrays and designing. |
| Outcome of the Course | : | Using LABVIEW Students can able to Plot data on the screen, Saving of data to a file. Saved data must be readable by a spreadsheet program .Emphasis on the practical aspects of interfacing a computer to various instruments including timing issues, real-time data acquisition and instrument control, instrument status, and acquisition speed |

K.S.R.M. College of Engineering - KADAPA
(AUTONOMOUS)
Department of Electrical & Electronics Engineering

Date: 03.01.19

**A brief report of the Course**:

A Software Implementation Training program is held during 14 – 29 December -2018 on "LABVIEW" for B.Tech VIII Sem Students in PG-111
from 09-04 PM (Every Friday and Saturday).
Sri MD. Mahaboob Pasha, Asst.Prof, ECE , Dept., has given excellent training to the students with various practical examples. Students have practiced the examples and clarified their droughts
All the participants are satisfied with his teaching methodologies and students have learned various skills to develop projects.
The Faculty Coordinator : Sri G. Suneel Kumar, Asst.Prof, ECE , Dept.
The student Coordinators are : K.Pranay
: D.Sai Rachana

Head of the Department

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 28/12 /2017

**Sub:** Value-added Courses on "**Introduction** to MATLAB Programming" from 04-12-2017 to 23-12-2017-Reg.

@@@

Here by informed all the ECE students that Department is going to conduct Course on "Introduction to MATLAB Programming" from 04.12.2017 To 23.12.2017 (Every day at 04.00 PM to 06:00PM).
The students those who are interested to participate in the above workshop may register their names with the following staff on or before 01/12/2017.

**Co-coordinators:**

1. Sri **K.Jagan Mohan, Assistant Professor, Department ofECE**
2. **Sri S.Munavar Ali, Assistant Professor, Department of ECE**

Sd/-xxxxx

Principal

**2017-18**

# Introduction to MATLAB Programming
## (Value Added Course)

**VAC Coordinator: Prof. P V Murali Krishna, HOD, Dept. of ECE**
**VAC Instructors: Sayed.Zahiruddin, Assistant Professor, Department of ECE**
**K.Pavan Kumar, Assistant Professor, Department of ECE**
**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Mat lab Programming | IV B.Tech VII Semester | 80 | 3 hrs/week (Maximum of 30 hours) |

**Prerequisite:**

1. C Programming, Basics of Engineering Mathematics
2. No prior knowledge of Matlab is required. Basic computer literacy is expected.

**Course Objectives:**

*1.* To Impart the Knowledge to the students with MATLAB software. *[This enhances programming knowledge in Research and Development]*.

*2.* To provide a working introduction to the Matlab technical computing environment. *[Themes of data analysis, visualization, and programming]*.

*3.* To introduce students the use of a high-level programming language, Matlab. *[scientific problem solving with applications and examples from Engineering]*.

**About Matlab:** MATLAB or (Matrix Laboratory) is a high performance fourth generation programming language which is used for technical computing. It provides multi paradigm numerical computing environment and was developed by Math Works. It is used for integrating computation, visualization, and programming so that the programming environment becomes easy to use. The applications of MATLAB are immense. It is a

powerful linear algebra tool with a very good collection of toolboxes; therefore it finds applications in research and teaching on domains of robotics and automation.

**Topics to be covered**:

1. Basics of Matlab and MATLAB Compiler

    - ✓ The Matlab user interface
    - ✓ Working with Matlab data types
    - ✓ Creating matrices and arrays
    - ✓ Operators and control statements
    - ✓ Using scripts and functions
    - ✓ Data import and export
    - ✓ Using the graphical features

2. Programming with simple examples

3. Discussion of Toolboxes with Applications

    - ✓ Signal Processing
    - ✓ Image Acquisition Toolbox
    - ✓ Image Processing
    - ✓ Neural Network
    - ✓ Fuzzy Logic Toolbox

4. Simulink and Hardware Interfacing (Using Kits: Lego, Raspberry Pi, Mind storms etc.)

**Learning Resources and References**: These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[1] http://www.eng-tips.com/threadminder.cfm?pid=575

[2] http://www.matlabtutorials.com/mathforum/

[3] http://www.mathworks.in/matlabcentral/

[4] http://www.cfd-online.com/Forums/tags/matlab.html

[5] http://diydrones.com/forum/topic/listForTag?tag=Matlab

[6] MATLAB Manuals and Handbooks

[7] Duane Hanselman, Bruce Little Field **"Mastering MATLAB 7" ,** Pearson Education India


**Course outcomes:** By the end of this course, the student will be able to

1. Understand the basics of Matlab

2. Break a complex task up into smaller, simpler tasks
3. Case Study (Any two Modules)
4. Tabulate results and Analyse

**Assessment:**
1. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
2. At the end of the Course each student will give a presentation on a topic covered in the course

**Companies Using Matlab:**
Companies ranging from automotive, banking, and software implement the MATLAB software. The lists of companies in automotive sector using the MATLAB Software are:

- Volvo
- Jaguar
- Mercedes
- BMW

A company from the software sector includes:

- Adobe Photoshop

All the Banking companies which involve crunches of calculations such as Citi Bank, HDFC do implement the concepts indirectly.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 03/09 /2018

**Sub:** Value-added Courses on "MSP430 Launch pad Programming & Interfacing" from 10.09.2018 To 29.09.2018 - Reg.

@@@

Here by informed all the ECE students that Department is going to conduct Course on "MSP430 Launch pad Programming & Interfacing" from 10.09.2018 To 29.09.2018 (Every day at 04.00 PM to 06:00PM).
The students those who are interested to participate in the above workshop may register their names with the following staff on or before 08/09/2018.

**Co-coordinators:**

1. Sri A .Valli Basha Assistant Professor in ECE
2. Sri. N.Radha Krishna Assistant Professor in ECE

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PRINCIPAL

**2018-19**

# MSP430 launch pad Programming & Interfacing

**(Value Added course)**

VAC Coordinator**:** **Prof.G.Hemalatha, HOD, Dept.of ECE**

VAC Instructors**:** **1) DrD.ArunKumar,** Asso.Prof, Dept.of ECE
**2) N.Radha Krishna**, Asst.Prof, Dept.of ECE
**And**
**Resource person(s) from Industry**

## Course Structure:

| Course | Class | No. of students | Duration |
|---|---|---|---|
| MSP430 Launch pad Programming & Interfacing | IV BTech,VII Semester | 74 | 3 hrs/week (Maximum of 30 hours) |

## Prerequisite:

This course has no specific prerequisites. However some familiarities with the following are especially helpful.

- 8051 Architecture
- Digital signal Processing
- C and Assembly Language Programming

## Course Objectives:

The goal of this course is to familiarize students with the concepts and practical skills required to successfully program embedded systems. After finishing the course, students should feel comfortable building their own projects using small microcontrollers such as the MSP430 from TI.

## About MSP430:

The Texas Instruments MSP430 family of ultra-low-power microcontrollers consists of several devices featuring different sets of peripherals targeted for various applications. The architecture, combined with five low-power modes, is optimized to achieve extended battery life in portable measurement applications. The device features a powerful 16-bit RISC CPU, 16-bit registers, and constant generators that contribute to maximum code efficiency. The

digitally controlled oscillator (DCO) allows wake-up from low-power modes to active mode in less than 1 µs.

The MSP430G2 launch pad uses the IAR Embedded Workbench Integrated Development Environment (IDE) or Code Composer Studio (CCS) to write, download, and debug an application. The debugger is unobtrusive, allowing the user to run an application at full speed with hardware breakpoints and single stepping available while consuming no extra hardware resources.

**Topics to be covered:**

- Basics of microcontrollers and its applications
- Introduction to MSP430,Its architecture
  - What is MSP430
  - Unique qualities of MSP430
  - System attributes
  - Different development tools
- Introduction to ccs and creating aproject
  - What is code composer studio
  - Workspaces and projects
- Building, debugging and watching variables, Break points
  - Understanding build options
  - Building and loading the project
  - Debug environment
- GPIO,Clock and Timers
- ADC,UART
- Flash writing, Character LCD

**Learning References:**

www.ti.com/msp430
www.ti.com/msp430usb
www.ti.com/msp430userguides
http://e2e.ti.com

- Introduction to MSP430 microcontroller by S Pavan Kumar

**Course outcome:**

After completion of this course, the student can able to implement different applications using MSP430 launch pad.

**Assessment:**

1. Every student has to undergo periodic tests.
2. At the end, each student has to give a presentation on a topic covered in this course.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 28/06 /2017

**Sub:** Value-added Courses on "Advanced VLSI Concepts" from 03.07.2017 To 22.07.2017 - Reg.

@@@

Here by informed all the ECE students that Department is going to conduct Course on "Advanced VLSI Concepts" from 03.072017 To 22.03.2017 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 01/7/2017.

**Co-coordinators:**

1. Sri R V Srihari Assoc-Professor in ECE
2. Mis . P.Lavanya Assistant Professor in ECE

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PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

# Advanced VLSI Concepts
**(Value Added Course)**

**VAC Coordinator: Dr. G.Hemalatha, HOD, Dept. of ECE**
**VAC Instructors: Smt. K.Divya lakshmi,Assistant Professor, Dept. of ECE**
**Sri. P.Krishna Teja, Assistant Professor, Dept. of ECE**
**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Advanced VLSI Concepts | B.Tech VI Sem | 90 | 04.12.2017 To 23.12.2017 |

**Note:** Timings 4PM to 6 PM

**Prerequisite:**

Advanced concepts in CMOS-based digital system design are studied. The topics include implementation of special purpose structures for complex digital systems, automation and verification of the design process, and design for testability (5545); and design techniques for low-power design, power dissipation estimation, and application of low-power techniques in the different levels of the design hierarchy (5546).

**Course Objective:**

Successful completion of this course sequence provides students with the ability to design, implement, and test state-of-the-art integrated circuits. As technology has evolved, it has become necessary to base this course sequence on the newest technology, CMOS, and to incorporate new tools, techniques and design principles into the sequence. The sequence introduces students to what is soon to become a fundamental design technique. The ability to design integrated circuits or to at least be able to analyze others designs has become a necessary attribute for many electrical and computer engineering practitioners. Additionally, to be broadly marketable in the industrial world, graduates of our program must have a reasonable depth of exposure to the CAD tools used to develop and analyze integrated circuits. This course sequence allows students to see how to physically implement some of the designs or design techniques they have learned in other classes and thus brings a level of closure to their curriculum.

**Topics to be covered:**

- Organize, design and layout a complex chip containing entities such as a register arrays, shifters, multipliers, an arithmetic logic unit (ALU), and other large scale devices.
- Integrate VLSI chip designs into larger complex system designs.
- Use automated layout tools to produce geometric descriptions of complex integrated circuit designs.
- Apply techniques used to test and debug IC designs. This includes the use of CAD tools to develop tests, and the use of design for testability techniques during the VLSI system design and implementation process.
- Design structured system building blocks for use in testable designs such as BIST LSSD and boundary scan devices.

**Learning Resources and References**:

*[1] www.nptelvideos.com › vlsi › vlsi_video_lectures_tutorials*
*[2]* https://www.w3schools.in › vlsi-tutorial
*[3] https://www.edureka.co › blog › advanced-vlsi-tutorial*
*[4] https://www.tutorialspoint.com ›VLSI*

*[5] https://nptel.ac.in › courses*

**Course outcomes:** By the end of this course, the student will be able to

5. Understand the basics of vlsi
6. Understand the concept of exception handling , database programming with VLSI.
7. Case Study

**Assessment:**

5. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
6. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 28/11/2017

**Sub:** Value-added Courses on "**Introduction** to MATLAB Programming" from 04-12-2017 to 23-12-2017-Reg.

@@@

Here by all the B.Tech VII Semester ECE students are informed that Department is going to conduct Course on "Introduction to MATLAB Programming" from 04.12.2017 To 23.12.2017 (Every day at 04.00 PM to 06:00PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 01/12/2017.

**Co-coordinators:**

1. Sri **K.Jagan Mohan, Assistant Professor, Department ofECE**
2. **Sri S.Munavar Ali, Assistant Professor, Department of ECE**

Sd/-xxxxx
Principal

**2017-18**

# Introduction to MATLAB Programming
## (Value Added Course)

**VAC Coordinator: Prof. P V Murali Krishna, HOD, Dept. of ECE**
**VAC Instructors: Sayed.Zahiruddin, Assistant Professor, Department of ECE**
**K.Pavan Kumar, Assistant Professor, Department of ECE**
**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Mat lab Programming | B.Tech VII Semester | 80 | 3 hrs/week (Maximum of 30 hours) |

**Prerequisite:**

3. Basics of Engineering Mathematics
4. Basic computer literacy is expected.

**Course Objectives:**

*1.* To Impart the Knowledge to the students with MATLAB software. *[This enhances programming knowledge in Research and Development]*.

*2.* To provide a working introduction to the Matlab technical computing environment. *[Themes of data analysis, visualization, and programming]*.

*3.* To introduce students the use of a high-level programming language, Matlab. *[scientific problem solving with applications and examples from Engineering]*.

**About Matlab:** MATLAB or (Matrix Laboratory) is a high performance fourth generation programming language which is used for technical computing. It provides multi paradigm numerical computing environment and was developed by Math Works. It is used for integrating computation, visualization, and programming so that the programming environment becomes easy to use. The applications of MATLAB are immense. It is a

powerful linear algebra tool with a very good collection of toolboxes; therefore it finds applications in research and teaching on domains of robotics and automation.

**Topics to be covered**:

5. Basics of Matlab and MATLAB Compiler

   - ✓ The Matlab user interface
   - ✓ Working with Matlab data types
   - ✓ Creating matrices and arrays
   - ✓ Operators and control statements
   - ✓ Using scripts and functions
   - ✓ Data import and export
   - ✓ Using the graphical features

6. Programming with simple examples

7. Discussion of Toolboxes with Applications

   - ✓ Signal Processing
   - ✓ Image Acquisition Toolbox
   - ✓ Image Processing
   - ✓ Neural Network
   - ✓ Fuzzy Logic Toolbox

8. Simulink and Hardware Interfacing (Using Kits: Lego, Raspberry Pi, Mind storms etc.)

**Learning Resources and References**: These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[8] http://www.eng-tips.com/threadminder.cfm?pid=575

[9] http://www.matlabtutorials.com/mathforum/

[10] http://www.mathworks.in/matlabcentral/

[11] http://www.cfd-online.com/Forums/tags/matlab.html

[12] http://diydrones.com/forum/topic/listForTag?tag=Matlab

[13] MATLAB Manuals and Handbooks

**[14]** Duane Hanselman, Bruce Little Field **"Mastering MATLAB 7" ,** Pearson Education India


**Course outcomes:** By the end of this course, the student will be able to

5. Understand the basics of Matlab

6. Break a complex task up into smaller, simpler tasks
7. Case Study (Any two Modules)
8. Tabulate results and Analyse

**Assessment:**

3. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
4. At the end of the Course each student will give a presentation on a topic covered in the course

**Companies Using Matlab:**

Companies ranging from automotive, banking, and software implement the MATLAB software. The lists of companies in automotive sector using the MATLAB Software are:

- Volvo
- Jaguar
- Mercedes
- BMW

A company from the software sector includes:

- Adobe Photoshop

All the Banking companies which involve crunches of calculations such as Citi Bank, HDFC do implement the concepts indirectly.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 03/09 /2018

**Sub:** Value-added Courses on "MSP430 Launch pad Programming & Interfacing" from 10.09.2018 To 29.09.2018 - Reg.

@@@

Here by all the BTech,VII Semester ECE students are informed that Department is going to conduct Course on "MSP430 Launch pad Programming & Interfacing" from 10.09.2018 To 29.09.2018 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 08/09/2018.

**Co-coordinators:**

1. Sri A .Valli Basha Assistant Professor in ECE
2. Sri. N.Radha Krishna Assistant Professor in ECE

Sd/-

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PRINCIPAL

**2018-19**

## MSP430 launch pad Programming & Interfacing

**(Value Added course)**

VAC Coordinator**:** **Prof. G. Hemalatha, HOD, Dept. of ECE**

VAC Instructors**:** **1) Dr. D. ArunKumar,** Asso. Prof, Dept. of ECE

**2)** **N. Radha Krishna**, Asst. Prof, Dept. of ECE

**And**

**Resource person(s) from Industry**

**Course Structure:**

| Course | Class | No. of students | Duration |
|---|---|---|---|
| MSP430 Launch pad Programming & Interfacing | BTech,VII Semester | 74 | 3 hrs/week (Maximum of 30 hours) |

**Prerequisite:**

This course has no specific prerequisites. However some familiarities with the following are especially helpful.

- 8051 Architecture
- Digital signal Processing
- C and Assembly Language Programming

**Course Objectives:**

The goal of this course is to familiarize students with the concepts and practical skills required to successfully program embedded systems. After finishing the course, students should feel comfortable building their own projects using small microcontrollers such as the MSP430 from TI.

**About MSP430:**

The Texas Instruments MSP430 family of ultra-low-power microcontrollers consists of several devices featuring different sets of peripherals targeted for various applications. The architecture, combined with five low-power modes, is optimized to achieve extended battery life in portable measurement applications. The device features a powerful 16-bit RISC CPU, 16-bit registers, and constant generators that contribute to maximum code efficiency. The

digitally controlled oscillator (DCO) allows wake-up from low-power modes to active mode in less than 1 µs.

The MSP430G2 launch pad uses the IAR Embedded Workbench Integrated Development Environment (IDE) or Code Composer Studio (CCS) to write, download, and debug an application. The debugger is unobtrusive, allowing the user to run an application at full speed with hardware breakpoints and single stepping available while consuming no extra hardware resources.

**Topics to be covered:**

- Basics of microcontrollers and its applications
- Introduction to MSP430,Its architecture
  - What is MSP430
  - Unique qualities of MSP430
  - System attributes
  - Different development tools
- Introduction to ccs and creating aproject
  - What is code composer studio
  - Workspaces and projects
- Building, debugging and watching variables, Break points
  - Understanding build options
  - Building and loading the project
  - Debug environment
- GPIO,Clock and Timers
- ADC,UART
- Flash writing, Character LCD

**Learning References:**

www.ti.com/msp430
www.ti.com/msp430usb
www.ti.com/msp430userguides
http://e2e.ti.com

- Introduction to MSP430 microcontroller by S Pavan Kumar

**Course outcome:**

After completion of this course, the student can able to implement different applications using MSP430 launch pad.

**Assessment:**

3. Every student has to undergo periodic tests.
4. At the end, each student has to give a presentation on a topic covered in this course.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 28/06 /2017

**Sub:** Value-added Courses on "Advanced VLSI Concepts" from 03.07.2017 To 22.07.2017 - Reg.

@@@

Here by all the B.Tech VI Sem ECE students are informed that Department is going to conduct Course on "Advanced VLSI Concepts" from 03.072017 To 22.03.2017 (Every day at 04.00 PM to 06:00PM).
The students those who are interested to participate in the above workshop may register their names with the following staff on or before 01/7/2017.

**Co-coordinators:**

1. Sri R V Srihari, Asso. Professor in ECE
2. Miss P. Lavanya, Assistant Professor in ECE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**
**Advanced VLSI Concepts**
**(Value Added Course)**

**VAC Coordinator: Dr. G. Hemalatha, Professor, Dept. of ECE**
**VAC Instructors: Smt. K. Divya lakshmi, Assistant Professor, Dept. of ECE**
**Sri P. Krishna Teja, Assistant Professor, Dept. of ECE**
**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Advanced VLSI Concepts | B.Tech VI Sem | 90 | 03.07.2017 To 22.03.2017 |

**Note:** Timings 4PM to 6 PM

**Prerequisite:**

Advanced concepts in CMOS-based digital system design are studied. The topics include implementation of special purpose structures for complex digital systems, automation and verification of the design process, and design for testability (5545); and design techniques for low-power design, power dissipation estimation, and application of low-power techniques in the different levels of the design hierarchy (5546).

**Course Objective:**

Successful completion of this course sequence provides students with the ability to design, implement, and test state-of-the-art integrated circuits. As technology has evolved, it has become necessary to base this course sequence on the newest technology, CMOS, and to incorporate new tools, techniques and design principles into the sequence. The sequence introduces students to what is soon to become a fundamental design technique. The ability to design integrated circuits or to at least be able to analyze others designs has become a necessary attribute for many electrical and computer engineering practitioners. Additionally, to be broadly marketable in the industrial world, graduates of our program must have a reasonable depth of exposure to the CAD tools used to develop and analyze integrated circuits. This course sequence allows students to see how to physically implement some of the designs or design techniques they have learned in other classes and thus brings a level of closure to their curriculum.

**Topics to be covered:**

- Organize, design and layout a complex chip containing entities such as a register arrays, shifters, multipliers, an arithmetic logic unit (ALU), and other large scale devices.
- Integrate VLSI chip designs into larger complex system designs.
- Use automated layout tools to produce geometric descriptions of complex integrated circuit designs.
- Apply techniques used to test and debug IC designs. This includes the use of CAD tools to develop tests, and the use of design for testability techniques during the VLSI system design and implementation process.
- Design structured system building blocks for use in testable designs such as BIST LSSD and boundary scan devices.

**Learning Resources and References**:

*[6] www.nptelvideos.com › vlsi › vlsi_video_lectures_tutorials*
*[7]* https://www.w3schools.in › vlsi-tutorial
*[8] https://www.edureka.co › blog › advanced-vlsi-tutorial*
*[9] https://www.tutorialspoint.com ›VLSI*
*[10] https://nptel.ac.in › courses*

**Course outcomes:** By the end of this course, the student will be able to

8. Understand the basics of vlsi
9. Understand the concept of exception handling , database programming with VLSI.
10. Case Study

**Assessment:**

7. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
8. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of ECE**

CIRCULAR

Date: 04/09/2017

**Sub:** Value-added Course on "ARM Based Embedded System" from 11-09-2017 To 30-09-2017 - Reg.

@@@

All the ECE students are here by informed that Department is going to conduct a course on "ARM Based Embedded System" from 11.09.2017 To 30.09.2017 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 08.09.2017.

**Co-coordinators:**

1. Smt.S.Sharmilla Bhanu Assistant Professor in ECE
2. Sri.M.Prabhakar Assistant Professor in ECE

Sd/-xxxxx

PRINCIPAL

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 01/12/2017

**Sub:** Workshop on "Advanced Java Programming" from 04.12.2017 To 23.12.2017 - Reg.

@@@

It is to inform all the students that college is going to conduct Workshop on "Advanced Java Programming" from 04.12.2017 To 23.12.2017 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 3.12.2017.

**Co-coordinators:**

1. Dr. V. Lokeswara Reddy Professor in CSE

2. Sri. S. Khaja Khizar Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

**Workshop on "Advanced Java Programming"**
**(Value Added Course)**

**VAC Coordinator: Dr. V. Lokeswara Reddy, Professor, Dept. of CSE**

**VAC Instructors: Smt. B. Manorama Devi,Assistant Professor, Dept. of CSE**

**Sri. S. Khaja Khizar, Assistant Professor, Dept. of CSE**

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Advanced Java Programming | B.Tech VI Sem | 50 | 04/12/2017 To 23/12/2017 |

**Note:** Timings 4PM to 6PM

**Prerequisite:**

5. If you already know C++ or any other Object-Oriented language, Java should be easy to pick up.

6. Basics of Java Programming.

**Course Objectives:**

- This course is to provide the ability to design console based, GUI based and web based applications. Students will also be able to understand integrated development environment to create, debug and run multi-tier and enterprise-level applications.

**About Advanced Java Programming:** Advanced java is used for web based application and enterprise application. Advanced java & nbsp; is two tier architecture i.e., client and server. Advance java programming covers swings, socket, awt, thread concept as well as collection object and classes.

**Topics to be covered**:

01. Introduction
02. Generic Programming
03. Sequential Collections
04. Associative Collections
05. Classic Data Structures
06. Sorting and Searching Algorithms
07. Exception Handling
08. Database Programming With JDBC
09. Network Programming
10. GUI Development with Swing

**Learning Resources and References**:


*[11]* *www.nptelvideos.com › java › java_video_lectures_tutorials*
*[12]* https://www.cse.iitb.ac.in › ~nlp-ai › javalect_august2004
*[13]* https://www.w3schools.in › java-tutorial
*[14]* *https://www.edureka.co › blog › advanced-java-tutorial*
*[15]* *https://www.tutorialspoint.com › java*
*[16]* *https://nptel.ac.in › courses*


**Course outcomes:** By the end of this course, the student will be able to

11. Understand the basics of Java Programming
12. Understand the concept of exception handling , database programming with JDBC and ODBC.
13. Swings, Socket, awt, Thread concept as well as collection object and classes
14. Case Study

**Assessment:**

9. Every student has to give periodic tests consisting of Programming tasks and Objective Questions

10. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 01/05/2019

**Sub:** Workshop on "Android Application Development" from 06.05.2019 To 25.05.2019 - Reg.

@@@

In this college the CSE department is going to organize Workshop on "Android Application Development" from 06.05.2019 To 25.05.2019 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 04.05.2019.

**Co-coordinators:**

1. Smt. S. Riyaz Bhanu Assistant Professor in CSE

2. Sri. N. Suresh Babu Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

**Workshop on "Android Application Development"**
**(Value Added Course)**

**VAC Coordinator: Sri. N. Ramanjanaeya Reddy, Assistant Professor, Dept. of CSE**

**VAC Instructors: Smt. S. Riyaz Bhanu, Assistant Professor, Dept. of CSE**

**Sri. N. Suresh Babu, Assistant Professor, Dept. of CSE**

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Android Application Development | B.Tech VI and VIIISem | 58 | 06/05/2019 To 25/05/2019 |

**Note:** Timings 4PM to 6PM

**Course Objectives**:

Android Application Development course is designed to quickly get you up to speed with writing apps for Android devices. The student will learn the basics of Android platform and get to understand the application lifecycle.

**Topics to be covered:**

1. Programming Revision (Object Oriented Programming Concepts & Java fundamental).
2. Android : Activities , Content Providers , Intents , Services ,Storage, Network, Multimedia , GPS , Phone Services , XML Layouts , widgets , permission , Sensor Manager - Accelerometer, gyroscope etc.
3. Threads, Animation, Refresher handler, Game Engine, Animated 2D Games, Google Play Store and Lot more.
4. Basics of Data Base, Introduction to SQ Lite and CRUD operations.
5. Project: Data base Application Development using SQ Lite, Client Server Application Development Using JSON for mobile Devices.

**Learning Resources and References**:

1. Sam's Teach yours elf Android Application Development ( 24 Hours )
2. Professional Android 4 Application Development
3. Android Programming for Beginners

**Course outcomes:**
By the end of the course, student will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more.

**Assessment:**

1. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
2. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 01/03/2019

**Sub:** Workshop on ".NET Technology" from 04.03.2019 To 23.03.2019
-

Reg.

@@@

It is informed all the students that college is going to conduct Workshop on ".NET Technology" from 04.03.2019 To 23.03.2019 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 02.03.20119.

**Co-coordinators:**

1. Smt. V. Sudha Assistant Professor in CSE

2. Smt. B. Swetha Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**
**Workshop on ".Net Technology"**
**(Value Added Course)**

**VAC Coordinator: Sri. S. Khaja Khizar, Assistant Professor, Dept. of CSE**
**VAC Instructors: Smt. V. Sudha, Assistant Professor, Dept. of CSE**
**Smt. B. Swetha, Assistant Professor, Dept. of CSE**
**And**
**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| .NET Technology | B.Tech VI and VIIISem | 53 | 04/03/2019 To 23/03/2019 |

**Note:** Timings 4PM to 6PM

**Course Objectives**:

.Net is a framework that provides programming guidelines that can be used to develop a wide range of applications from web to mobile to windows-based application. The .NET framework can work with several programming languages such as C#.VB.NET and ASP.NET.

**Topics to be covered**:

1. Introduction to the .NET initiative and the .NET platform
2. Code Management
3. Language Features of C#&VB.NET
4. Using controls and components for designing application.
5. Object oriented programming concepts.
6. Error and Exception handling
7. Design web application using ASP.net

**Learning Resources and References**:


*[17]* www.productivecsharp.com/master/C#8
*[18]* www.dotnetcurry.com
*[19]* www.w3schools.com
*[20]* docs.microsoft.com

**Course outcomes:**

By the end of this course, the student will be able to

15. Understand the basics of C#,VB.NET&ASP.NET
16. Understand the concept of error and exception handling .
17. Understand the OOPS Concepts.
18. Case Study.

**Assessment:**

11. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
12. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 01/03/2018

**Sub:** Workshop on ".NET Technology" for CSE Students - Reg.

@@@

It is inform all the students that college is going to conduct Workshop on ".NET Technology" from 05.03.2018 To 23.03.2018(Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 02.03.2018.

**Co-coordinators:**

1. Smt. M.V. Rathanamma Assistant Professor in CSE

2. Smt. P. Bhavya Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**
**Workshop on ".Net Technology"**
**(Value Added Course)**

**VAC Coordinator: Sri. S. Khaja Khizar, Assistant Professor, Dept. of CSE**
**VAC Instructors: Smt. M.V. Rathanamma , Assistant Professor, Dept. of CSE**
**Smt. P. Bhavya , Assistant Professor, Dept. of CSE**
**And**
**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| .NET Technology | B.Tech VI and VIIISem | 45 | 05/03/2018 To 23/03/2018 |

**Note:** Timings 4PM to 6PM

**Course Objectives**:

.Net is a framework that provides programming guidelines that can be used to develop a wide range of applications from web to mobile to windows-based application. The .NET framework can work with several programming languages such as C#.VB.NET and ASP.NET.

**Topics to be covered**:

1. Introduction to the .NET initiative and the .NET platform
2. Code Management
3. Language Features of C#&VB.NET
4. Using controls and components for designing application.
5. Object oriented programming concepts.
6. Error and Exception handling
7. Design web application using ASP.net

**Learning Resources and References**:


*[21]* www.productivecsharp.com/master/C#8
*[22]* www.dotnetcurry.com
*[23]* www.w3schools.com
*[24]* docs.microsoft.com

**Course outcomes:**

By the end of this course, the student will be able to

19. Understand the basics of C#,VB.NET&ASP.NET
20. Understand the concept of error and exception handling .
21. Understand the OOPS Concepts.
22. Case Study.

**Assessment:**

13. Every student has to give periodic tests consisting of Programming tasks and Objective Questions
14. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 01/02/2018

**Sub:** Workshop on "Python for everybody" from 05.02.2018 To 24.02.2018 - Reg.

@@@

It is informed all the students that college is going to conduct Workshop on "Python for everybody" from 05.02.2018 To 24.02.2018 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 03.02.2018.

**Co-coordinators:**

1. Smt. B.Gouri Assistant Professor in CSE

2. Sri. M. Purushothama Reddy Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

**Workshop on "Python for everybody"**
**(Value Added Course)**

**VAC Coordinator: Dr. V. Lokeswara Reddy, Professor, Dept. of CSE**

**VAC Instructors: Smt. B. Gouri, Asst. Prof., Dept. of CSE**

**Sri. M.Purushothama Reddy, Asst. Prof., Dept. of CSE**

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Python for everybody | B.Tech IV,VI and VIIISem | 60 | 05/02/2018 To 24/02/2018 |

**Note:** Timings 4PM to 6PM

**Prerequisite:**

- If you already know C or any other Programming language, Python should be easy to pick up.

**Course Objectives:**

- This course is to provide the ability to design console based, GUI based and web based applications. Students will also be able to understand integrated development environment to create, debug and run multi-tier and enterprise-level applications.

**About Python for everybody:** This Specialization builds on the success of the Python for Everybody course and will introduce fundamental programming concepts including data structures, network application program interfaces, and databases, using the Python programming language. In the Capstone Project, you'll use the technologies learned throughout the Specialization to design and create your own applications for data retrieval, processing, and visualization.

**Topics to be covered**:

- Explain the basics of programming concepts using Python
- Understand fundamental programming concepts such as data structures
- Describe the basics of the Structured Query Language (SQL) and database design
- Create your own applications for data retrieval and processing

**Course outcomes:** By the end of this course, the student will be able to

- Understand the basics of Python Programming
- Understand fundamental programming concepts such as data structures
- Basics of the Structured Query Language (SQL) and database design

**Assessment:**

15. Every student has to give periodic tests consisting of Programming tasks and Objective Questions

16. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 06/09/2018

**Sub:** Workshop on "Python for everybody" from 10.09.2018 To 29.09.2018 - Reg.

@@@

It is informed all the students that college is going to conduct Workshop on "Python for everybody" from 10.09.2018 To 29.09.2018 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 08.09.2018.

**Co-coordinators:**

1. Smt. B.Gouri Assistant Professor in CSE

2. Sri. M. Purushothama Reddy Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

**Workshop on "Python for everybody"**
**(Value Added Course)**

**VAC Coordinator: Dr. V. Lokeswara Reddy, Professor, Dept. of CSE**

**VAC Instructors: Smt. B. Gouri, Asst. Prof., Dept. of CSE**

**Sri. M.Purushothama Reddy, Asst. Prof., Dept. of CSE**

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Python for everybody | B.Tech V, and VII Sem | 35 | 10/09/2018 To 29/09/2018 |

**Note:** Timings 4PM to 6PM

**Prerequisite:**

- If you already know C or any other Programming language, Python should be easyto pick up.

**Course Objectives:** This course is to provide the ability to design console based, GUI based and web based applications. Students will also be able to understand integrated development environment to create, debug and run multi-tier and enterprise-level applications.

**About Python for everybody:** This Specialization builds on the success of the Python for everybody course and will introduce fundamental programming concepts including data structures, network application program interfaces, and databases, using the Python programming language. In the Capstone Project, you'll use the technologies learned throughout the Specialization to design and create your own applications for data retrieval, processing, and visualization.

**Topics to be covered**:

- Explain the basics of programming concepts using Python
- Understand fundamental programming concepts such as data structures

- Describe the basics of the Structured Query Language (SQL) and database design
- Create your own applications for data retrieval and processing

**Course outcomes:** By the end of this course, the student will be able to

- Understand the basics of Python Programming
- Understand fundamental programming concepts such as data structures
- Basics of the Structured Query Language (SQL) and database design

**Assessment:**

1. Every student has to give periodic tests consisting of Programming tasks and Objective Questions

2. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 03/05/2018

**Sub:** Workshop on "Web Design" for CSE Studetns - Reg.

@@@

It is decided to conduct Workshop on "Web Design" from 07.05.2018 To 26.05.2018 (Every day at 04.00 PM to 06:00PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 5.05.2018.

**Co-coordinators:**

1. Smt. V. Sudha Assistant Professor in CSE

2. Smt. B. Swetha Assistant Professor in CSE

Sd/-xxxxx

PRINCIPAL

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

**Workshop on "Web Design"**
**(Value Added Course)**

**VAC Coordinator: Sri. S. Khaja Khizar, Assistant Professor, Dept. of CSE**

**VAC Instructors: Smt. V. Sudha, Assistant Professor, Dept. of CSE**

**Smt. B. Swetha, Assistant Professor, Dept. of CSE**

**And**

**Resource Person(s) from Industry**

**Course Structure:**

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Web Design | B.Tech IV,VI and VIIISem | 62 | 07/05/2018 To 26/05/2018 |

**Note:** Timings 4PM to 6PM

**Course Objectives**: Become familiar with graphic **design** principles that relate to **webdesign** and learn how to implement theories into practice. Develop skills in analyzing the usability of a **web** site. Understand how to plan and conduct user research related to **web** usability. Learn the language of the **web**: HTML,DHTML,PHP and CSS.

**About web design: Web design** is the visual aesthetics and page layout of a website. It goes hand-in-hand with web development in the creation of a static website or dynamic web application. Even if you don't consider yourself a creative person, it's still a good idea to learn **web design**.

**Topics to be covered**:
Session I: Hyper Text Markup Language

- Internet basics
- Introduction to HTML
- Lists
- Adding graphics to HTML documents
- Tables
- Linking documents

- Frames
- Projects in HTML

Session II: Java Script

- Introduction to Java script
- The Java script document object model
- Forms used by a website
- Cookies
- Projects in Java script

Session III: Dynamic Hyper Text Markup Language

- Cascading Style Sheets
  Font attributes
  Color and background attributes
  Text attributes
  Border attributes
  Margin related attributes
  List attributes
- Class
  External Style Sheets
  Working with Java script style sheets
  Layers

**Learning Resources and References**:


[1] www.nptelvideos.com › java › java_video_lectures_tutorials
[2] https://www.cse.iitb.ac.in › ~nlp-ai › javalect_august2004
[3] https://www.w3schools.in › java-tutorial
[4] https://www.edureka.co › blog › advanced-java-tutorial
[5] https://www.tutorialspoint.com › java
[6] https://nptel.ac.in › courses


**Course outcomes:** By the end of this course, the student will be able to

1. Understand the basics of Java Programming
2. Understand the concept of exception handling , database programming with JDBC and ODBC.
3. Swings, Socket, awt, Thread concept as well as collection object and classes
4. Case Study

**Assessment:**

1. Every student has to give periodic tests consisting of Programming tasks and Objective Questions

2. At the end of the Course each student will give a presentation on a topic covered in the course

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of CSE**

CIRCULAR

Date: 30/11/2018

**Sub:** "Yoga" from 3.12.2018 To 22.12.2018 for CSE Students - Reg.

@@@

Now-a-days most of the people are busy with their works. So, for relief we need to perform some activities to free from stress.

In this connection the college is going to conduct "YOGA" classes by Sri. I. Harinath Reddy from 3.12.2018 To 22.12.2018 (Every day at 04.00 PM to 05:00PM).

All the students are requested to utilize this opportunity and participate in YOGA classes during the above period.

Sd/-xxxxx

PRINCIPAL

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 24/01/2018

**Sub:** Value-added Courses on **"Introduction to MATLAB"** from 05-02-2018 to 24-02-2018-Reg.

@@@

Here by all the B.Tech VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Introduction to MATLAB" from 05.02.2018 to 24.02.2018 (Every day at 04.00 PM to 06:00 PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 03/02/2018.

**Co-coordinators:**

1. Sri. U. Pradeep Kumar, Assistant Professor in ME

2. Sri. D. Merwin Rajesh, Assistant Professor in ME

Sd/-xxxxx
PRINCIPAL

# 2017-18

# Introduction to MATLAB

(Value Added Course)

VAC Coordinator: **Dr. D. Ravi Kanth,** Prof., Dept. of ME

VAC Instructors**:** 1) **Sri. U. Pradeep Kumar,** Asst. Prof., Dept. of ME
2) **Sri. D. Merwin Rajesh,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry

**1) Sri. Hari Kishore Reddy**

## Course Structure:

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Introduction to MATLAB | B. Tech VII Semester | 120 | Maximum of 45 hours |

## Pre-requisites:

- Undergraduate-level mathematics and experience with basic compute operations.
- C Programming, basics of engineering mathematics and respective equations.
- No prior knowledge of Matlab is required. Basic computer literacy is expected.

## Course Objectives:

The objective of this course is to introduce undergraduate students to computational methods using MATLAB. Become familiar with the main features of the MATLAB integrated design environment and its user interfaces. Perform typical data analysis tasks in MATLAB, including importing data from file, preprocessing data, fitting a model to data and creating a customized visualization of the model. Get an overview of course themes.

- The ability to formulate an engineering problem in a mathematical form appropriate for subsequent computational treatment and to choose an appropriate numerical approach.
- The ability to select, test, and use (or reject) third-party numerical programs with confidence.

- The ability to solve mechanical engineering problems by computational approaches through a combination of MATLAB scripts (typically rather short) and validated and informed calls to MATLAB or third-party numerical routines.
- An understanding of elementary programming concepts and of the basic MATLAB architecture/environment, data types, syntax, and mathematical/numerical routines.

## About MATLAB:

MATLAB is a popular language for numerical computation. This course introduces students to MATLAB programming, and demonstrates its use for scientific computations. The basis of computational techniques is expounded through various coding examples and problems, and practical ways to use MATLAB will be discussed.

## Topics to be covered:

**Chapter 1** **10hrs**

***Introduction:***

Historical Background, Applications, Scope of MATLAB, Importance of MATLAB for Engineers, Features, MATLAB Windows (Editor, Work Space, Command History, Command Window). Basics of MATLAB programming, Array operations in MATLAB, Loops and execution contro, working with files: scripts and functions and plotting and output. Operations with Variables, Naming and Checking Existence, Clearing Operations, Commands, Data types, Operators.

**Chapter 2:** **6hrs**

***Data and Data Flow in MATLAB:***

Vectors, Matrix Operations & Operators, Reshaping Matrices, Arrays, Colon Notations, Numbers, Strings, Functions, File Input-Output, Importing and Exporting of data.

**Chapter 3:** **9hrs**

***MATLAB Programming:***

Conditional Statements, Loops, Writing Script Files, Error Correction, Saving Files, Worked out Examples.

**Chapter 4:** **10hrs**

***MATLAB Advanced:***

Plotting, Graphics, Creating Plot and Editing Plot, GUI (Graphical User Interface). MATLAB- Algebra, Calculus, Differential, Integration, Polynomials, solving a system of

linear equations.

**Chapter 5:** **10hrs**

***SIMULINK:***

Introduction, Importance, Model Based Design, Tools, Mathematical Modeling, Converting Mathematical Model into Simulink Model, Running Simulink Models, Importing Exporting Data, Solver Configuration, Masking Block/Model.

**Total Hrs: 45**

## Learning Resources and References:

These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[15] A Practical Introduction to Programming and Problem Solving. Attaway, Stormy. 2012.

[16] Notes and supplementary lecture slides.

[17] Matlab code will also be posted in the soil physics web page www.soilphysics.okstate.edu

[18] Matlab online glossary: http://people.sc.fsu.edu/~jburkardt/html/matlab_glossary.html

[19] Matlab Central: http://www.mathworks.com/matlabcentral/


**Course outcomes:** By the end of this course, the student will be able to

- Express programming and simulation for engineering problems.
- Some knowledge about structures and cell-arrays and tables.
- Thorough knowledge of MatLab`s anonymous functions.
- Thorough knowledge about inbuilt Matlab functions regarding mathematics applicable for bachelors in the field of mechanical engineering.
- Good knowledge about plotting and manipulation of plots in MatLab
- Good knowledge about tailor-made functions regarding practical numeric problems for bachelors in the field of mechanical engineering.

## Assessment:

- Assessment is based on three components: five problem sets, quizzes and the cumulative MATLAB exercises for the entire semester.
- Every student has to give periodic tests consisting of programming tasks and Objective Questions.
- At the end of the course each student will give a presentation on a topic covered in the course.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 26/02/2018

**Sub:** Value-added Courses on "**Autodesk Fusion 360**" from 05-03-2018 to 24-03-2018-Reg.

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Here by all the B.Tech VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Autodesk Fusion 360" from 05.03.2018 To 24.03.2018 (Every day at 04.00 PM to 06:00 PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 03/03/2018.

**Co-coordinators:**

1. Sri. D. Merwin Rajesh, Assistant Professor in ME

2. Sri. S. Mallikarjuna Reddy, Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2017-18

# Autodesk Fusion 360

(Value Added Course)

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VAC Coordinator**:** **Sri. T. V. V. S. N. Murthy,** Assoc. Prof., Dept. of ME

VAC Instructors**:** **1) Sri. D. Merwin Rajesh,** Asst. Prof., Dept. of ME
**2) Sri. S. Mallikarjuna Reddy,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry
**1) Dr. D. Krishna Mohan Raju**

## Course Structure:

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Autodesk Fusion 360 | B. Tech VII Semester | 120 | Maximum of 40 hours |

## Pre-requisites:

- No previous CAD experience is necessary.
- It is recommended that student have working knowledge of Microsoft® Windows ®7, Microsoft® Windows ®8 and Microsoft® Windows®10.
- Fusion simulation will use multiple cores for meshing and solving when these operations are run locally, but it doesn't use multiple cores all the time.
- Meshing can use more cores if you have lots of parts, but it will only use one core if you have a single part.
- Experienced with the Windows operating system and a background in drafting of 3D parts is recommended.

## Course Objectives:

This course will cover principles of 3D parametric part design, assembly design and creating production-ready part, and assembly drawing by using Autodesk Fusion 360. After completing this course user will be able to:

- Understand the design process in Autodesk Fusion 360
- Able to design model from conceptual sketching through solid modeling

- Create multiple designs using several of tools and understand how to assembly parts create new bodies and components using parametric solid models and sculpted free form models
- Understand how to use work plane on X, Y, Z axis

## About Autodesk Fusion 360:

In this course students will learn to use the different workspaces within Fusion 360. In this course, students will progress from creating a basic sketch to full working assembly, which they will then learn to create renders, simulations, drawings and CAM tool paths. Following completions of this course student will become and showcase their designs.

## Topics to be covered:

**Chapter 1** **5hrs**

***Getting Started:***

Autodesk Fusion 360 User Interface, Data Panel Interface, Navigating the model, Understanding workspace, Design history.

**Chapter 2:** **6hrs**

***Intermediate Sketching:***

Creating a new sketch, Creating geometry in sketch, understanding sketch constraints, Creating circles, Sketching rectangles, creating arcs, sketching polygons, Projecting geometry and editing sketch geometry.

***Sculpting:***

Creating a T-Spline form, Modifying a T-Spline form, Add details to T-Spline form, Editing T-Spline form.

**Chapter 3:** **9hrs**

***Solid Modelling:***

Using Quick Shape Creation, Using the Extrude Feature, Using the Revolve Feature, Using the Sweep Feature, Using the Rib Feature, Using The Press/Pill Feature, Using Thicken to Create a Solid From Surfaces and Working with Parameters.

***Editing Your Model:***

Editing a Solid-Fillet and Chamfer, Editing a Solid-Rule Fillets, Editing a Solid-Hole, Editing a Solid-Shell, Editing a Solid-Draft, Editing a Solid-Combine, Editing a Solid-Split, Editing a Solid-Delete, Editing a Solid-Move, Editing a Solid-Replace Face, Editing a Solid-Align,

Duplicating a Solid-Mirror and Duplicating a Solid-Pattern.

**Chapter 4:** **10hrs**

***Model Assembly:***

Understanding Components in Fusion 360, Creating Components, Reusing Components, Positioning Components, Working with Components in the Browser, Introducing Joints-Using the Rigid Joint Type, Working with the Different Types of Joints, Creating Slider and Planar Joints, Understanding Joint Origins, Creating Rigid Groups, Understanding Contact Sets, Enabling Motion Linking and Driving Joints.

**Chapter 5:** **10hrs**

***Drawing:***

About Fusion 360 Drawings, Creating a Drawing of a model, Creating Views, Create and Edit Annotations, Drawing Settings and preferences Output the Drawing.

**Total Hrs: 40**

## Learning Resources and References:

These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[20] https://www.autodesk.in/products/fusion-360/learn-support

[21] https://warwick.ac.uk/fac/sci/wmg/about/outreach/resources/fusion_tutorials/

[22] https://www.cadac.com/media/5419/fusion-360-resources.pdf

[23] sculpteo.com/en/tutorial/prepare-your-model-3d-printing-fusion360/

[24] https://www.cadcim.com/autodesk-fusion-360-a-tutorial-approach


**Course outcomes:** By the end of this course, the student will be able to

- After completion of the course, students will be able to design their product from idea to prototype.
- Gain experience of the design, assembly and simulation environment of Fusion 360.
- Summarize an understanding of digital manufacturing, principles of sustainable design and manufacturing processes.
- Gain confidence, resources and project ideas for teaching Computer Aided Design (CAD).

## Assessment:

- Every student has to give periodic tests consisting of Objective Questions.
- At the end of the course each student will give a design a given part and submit.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 24/05/2018

**Sub:** Value-added Courses on **"HYPERMESH SOFTWARE"** from 04-06-2018 to 23-06-2018-Reg.

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Here by all the B.Tech VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "HyperMesh Software" from 04.06.2018 to 23.06.2018 (Every day at 04.00 PM to 06:00 PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 05/06/2018.

**Co-coordinators:**

1. Sri. U.Pradeep Kumar Assistant Professor in ME

2. Sri. B.Subbarayudu Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2017-18

# Introduction to HyperMesh

(Value Added Course)

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VAC Coordinator**:** **Sri. K. Suresh Kumar,** Assoc. Prof, Dept. of ME

VAC Instructors**:** 1) **Sri. U. Pradeep Kumar,** Asst. Prof., Dept. of ME
**2) Sri. B. Subbarayudu,** Asst. Prof., Dept. of ME
and

Resource person(s) from Industry

**1) Sri. T. Rajendra Prasad**

## Course Structure:

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Introduction to HyperMesh | B. Tech VII Semester | 120 | Maximum of 45 hours |

## Pre-requisites:

- There is no set qualification for this training.
- A basic knowledge of finite element analysis.
- Basic knowledge of CAD modeling on any software will be advantages.
- Knowledge of fundamentals of mechanics ofsolids like stress, strains, heat transfer, and machine design will be helpful in understanding the analysis.
- Hypermesh software version 2017 or any older version up to 13.

## Course Objectives:

HyperMesh training course helps students to work on a CAE (Computer Aided Engineering) simulations software platform. This course will enable the students to create finite element models for analysis and make high-quality meshes in an efficient manner. This course will also cover the skills that are needed to work with geometry editing tools for design CAD models for the meshing process.

- This course is designed to help student's professionals to use Hypermesh to manage and receive high-quality meshes efficiently.

- This course will help you learn to use geometry editing tools for preparing CAD and CAE models used in the meshing process. Also, through this course, you will learn FEM analysis.

## About HYPERMESH:

Hypermesh software is the most popular and leading, multi-disciplinary finite element pre-processor which is used to manage the generation of largest and most complex models, initiating from import of a CAD geometry and ending with ready-to-run solver file. Topics to be covered:

**Chapter 1** **5hrs**

***Introduction:***

Basic interaction with HyperMesh
User interface
Opening/saving files
Working with panels
Model organization
Display control

**Chapter 2:** **5hrs**

Shell meshing
Automeshing – meshing on surface geometry
Checking and editing mesh
Batch meshing
Preparing models for analysis
Creating boundary conditions
Formatting for solvers

**Chapter 3:** **5hrs**

Preparing geometry for meshing
Repairing surface topology
Midsurfaces
Defeaturing models
Refining surface topology
Creating hexa and penta mesh
Creating & editing solid geometry
Creating hex mesh with the solid map panel

**Chapter 4:** **5hrs**

Tetra meshing
Method 1 – standard tetramesh
Method 2 – volume tetramesh

Method 3 – quick tetramesh

**Chapter 5:** **5hrs**

Assemblies: welding and swapping parts
Spot connectors
Area conectors
Bolt connectors
Part replacement

**Total Hrs: 25**

## Learning Resources and References:

These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[25] https://www.designtechcadacademy.com/individual-course/hypermesh-advanced-training

[26] https://www.udemy.com/course/altair-hypermesh-learn-meshing-and-linear-static-analysis/

[27] https://courses.skill-lync.com/course/hypermesh-for-fea


## Course Outcomes: By the end of this course, the student will be able to

- Student will learn about Finite Element Analysis (FEA).
- Student will know about Shell, Tetra, and HyperMeshing.
- Student will be able to create hexa and penta mesh.
- Student will be able to do assemblies: Welding and Swapping Parts.
- Student will learn about Topography and Topology
- Student will learn about Thermal, Static and Normal Mode analysis.
- Student will know to prepare models for analysis and geometry for meshing.
- Student will know to define manufacturing constraints.
- Student will know to do 2D and 3D shape optimization and 1D and 2D size optimization.

## Assessment:

- Assessment is based on three components: five problem sets and quizzes.
- Every student has to give periodic tests consisting of programming tasks and Objective Questions.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 24/04/2018

**Sub:** Value-added Courses on "**Advanced-CAD (CREO PARAMETRIC)**" from 07-05-2018 to 26-05-2018-Reg.

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Here by all the B.Tech VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Advanced-CAD (CREO PARAMETRIC)" from 07.05.2018 To 26.05.2018 (Every day at 04.00 PM to 06:00 PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 06/05/2018.

**Co-coordinators:**

1. Dr. D. Ravikanth, Professor in ME

2. Sri. S. Mallikarjuna Reddy, Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2017-18

# Advanced-CAD (CREO PARAMETRIC)

(Value Added Course)

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VAC Coordinator**:** **Sri. C. Nagaraja,** Asst. Prof., Dept. of ME

VAC Instructors**:** 1) **Dr. K.RAJA GOPAL,** Prof., Dept. of ME

**2) Sri. B. Subbarayudu,** Asst. Prof., Dept. of ME

and

Resource person(s) from Industry

**1) Sri. I. Krishna**

## Course Structure:

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Advanced-CAD (CREO PARAMETRIC) | B. Tech VII Semester | 120 | Maximum of 45 hours |

## Pre-requisites:

- You should have basic understanding of computer. That's it you need to know!
- Creo parametric 2.0 or any higher versions.
- You can use free trial version of Creo parametric software or free educational version. So no need to worry about purchasing the software.
- No prior knowledge. Just the desire to learn and create awesome designs.

## Course Objectives:

- Utilize the Interface enhancements in Creo Parametric.
- Utilize the Sketcher enhancements in Creo Parametric
- Utilize the Modeling enhancements in Creo Parametric
- Utilize the Assembly enhancements in Creo Parametric
- Utilize the Drawing enhancements in Creo Parametric
- Utilize the Sheetmetal enhancements in Creo Parametric

## About Creo:

This course designed in such a way that you will learn about all important tools and

commands of the software. This is a streamlined course to take you from knowing nothing about Creo to give you all the knowledge and skills needed to become a certified Creo designer. This course should enable you to, with confidence; use Creo to design your next innovation. After this course, you can proudly list your Creo skills in your resume.

## Topics to be covered:

**Chapter 1** **6hrs**

***Getting Started:***

Introduction to CREO PARAMETRIC & CATIA, Description of the feature that have been added or changed since new Release software. Criteria for selection of CAD workstations, Shingle Design Process, Design criteria, Geometric modelling, entities, 2D and 3D Primitives. Different Types of cad software.

**Chapter 2:** **6hrs**

***Intermediate Sketching:***

Sketching in CREO PARAMETRIC, Creating and constraining various sketch profile, Operations on sketch Geometry viz. corner, quick trim, break, chamfer. Project 3D Elements, Intersect 3D Elements, Isolate sketch profile. Various sketch based projects.

**Chapter 3:** **10hrs**

Various workbench based features viz. pad, pocket, shaft, Groove, Hole etc. Transformation Features Translate, Rotate, Mirror, R/C pattern, Scale etc. Surface Based Features split, close surface, sew surface. Various advance tasks power copy, catalogs, design table etc. Tweak features. Various surface creation methods method extrude, revolve, offset, swept, loft. Operation on shape geometry join, healing, trim, extract geometry projects. Advanced commands e.g. bend solid, toroid bend etc.

**Chapter 4:** **10hrs**

Various Assembly constraints. Working with bottom up and top down assembly. Design in context. Generating bill of material. Tool Develop & design in CREO PARAMETRIC. Creating various views through wizard. Creating various section views. Add a B.O.M. Adding text and labels. Dimensioning, Various engineering symbols, Translators. Tool Develop & design in CREO PARAMETRIC.

**Total Hrs: 32**

## Learning Resources and References:

These are some of the links and books which can help students in increasing their

knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:

[28] https://www.ptc.com/~/media/Files/PDFs/Services/Curriculum-Guides/Curriculum_Guide_Creo_2-0.ashx?la=en

[29] https://www.ptc.com/en/products/cad/creo/parametric

**Course outcomes:** By the end of this course, the student will be able to

- Understand advance Computer aided design software (CREO PARAMETRIC) as compare to other CAD software.
- Create 2D geometric sketches by using CREO PARAMETRIC software.
- Develop 3D solid & surface modeling by using advanced command.
- Understand assembly constraint & develop different types of assembly design.
- Understand design generative & interactive drafting.

## Assessment:

The following must be assessed in a proctored timed setting:

- Given a fully dimensioned mechanical drawing (orthographic or isometric views) of an object, create an accurate #D solid model.
- Assemble multiple 3D solid models into a model assembly. Use correct assembly constraints mates to fully constraint the assembly.
- Create a multiview orthographic mechanical drawing with dimensions on a standard drawing format.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

## CIRCULAR

Date: 25/06 /2018

**Sub:** Value-added Courses on "**Product and Process Design**" from 02.07.2018 To 21.07.2018 - Reg.

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Here by all the B.Tech, VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Product and Process Design" from 02.07.2018 to 21.07.2018 (Every day at 04.00 PM to 06:00 PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 30/06/2018.

**Co-coordinators:**

1. Sri. A. Harikrishna, Assistant Professor in ME

2. Sri. S. Mallikarjuna Reddy, Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2018-19

# Product and Process Design

(Value Added Course)

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VAC Coordinator**:** **Sri. P. Sreenivas,** Asst. Prof., Dept. of ME

VAC Instructors**:** 1) **Sri. A. Harikrishna,** Asst. Prof., Dept. of ME
**2) Sri. S. Mallikarjuna Reddy,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry
**1) Sri. Y. Narasimha Reddy**

## Course Structure:

| Course | Class | No. of students (Max) | Duration |
|---|---|---|---|
| Product and Process Design | B. Tech, VII Semester | 120 | Maximum of 40 hours |

## Prerequisite:

In this course has a specific prerequisite. However some familiarities with the following are especially helpful.

- Students with a strong interest in products and design
- Bachelor of Technology in Engineering or consent of instructor.

## Course Objectives:

The course is targeted towards understanding product development and design process. We emphasize learning by doing.

- Apply tools and frameworks from class.
- Learn to think and ideate with constraints.
- Apply your existing knowledge.
- Improve tam work, communication, and project design management skills.
- In doing so student will recognize critical elements in product development strategy.
- Understand aspects of conceptual design and design innovation and to work in real

world product development environments to integrate product and business aspects.

## About Product and Process Design:

This course is about design innovation, creativity and doing design. The focus is on learning to design and design processes. The concepts of product design are addressed from a multidisciplinary perspective that includes opportunity determination through inspiration, ideation and implementation using design thinking framework. This course focuses on the aspects of imagining future products and processes, Design Thinking and the Product Design Process.

## Topics to be covered:

**Chapter-1** **[6 Hrs]**

**Introduction:**

Need for IPPD-Strategic importance of Product development - integration of customer, designer, material supplier and process planner, Competitor and customer - behavior analysis. Understanding customer-promoting customer understanding-involve customer in development and managing requirements-Organization process management and improvement.

**Chapter-2** **[5 Hrs]**

**CONCEPT GENERATION, SELECTION AND TESTING:**

Plan and establish product specifications. Task - Structured approaches - clarification – search externally and internally-Explore systematically - reflect on the solutions and processes - concept selection - methodology - benefits. Implications - Product change - variety - component standardization - product performance - manufacturability – Concept Testing Methodologies.

**Chapter-3** **[10 Hrs]**

**PRODUCT ARCHITECTURE**

Product development management - establishing the architecture - creation - clustering - geometric layout development - Fundamental and incidental interactions - related system level design issues - secondary systems -architecture of the chunks - creating detailed interface specifications-Portfolio Architecture.

**Chapter-4** **[10 Hrs]**

**INDUSTRIAL DESIGN**

Integrate process design – Managing costs – Robust design – Integrating CAE, CAD, CAM tools – Simulating product performance and manufacturing processes electronically – Need for industrial design – impact – design process – investigation of for industrial design –

impact – design process – investigation of customer needs – conceptualization – refinement – management of the industrial design process – technology driven products – user – driven products – assessing the quality of industrial design.

**Chapter-5** **[10 Hrs]**

**DESIGN FOR MANUFACTURING AND PRODUCT DEVELOPMENT**

Definition – Estimation of Manufacturing cost – reducing the component costs and assembly costs – Minimize system complexity – Prototype basics – principles of prototyping – planning for prototypes – Economic Analysis – Understanding and representing tasks – baseline project planning – accelerating the project – project execution.

**Total: 40 Hrs**

## Learning References:


1. Lawrence D. Miles; "Techniques of Value Analysis and Engineering", 2nd Edition, McGraw-Hill Book Company, Inc. New York.
2. Larry W. Zimmerman, Glen D. Hart; "Value Engineering", Reprint 1999, CBS Publishers and Distributors, New Delhi.
3. A. K. Chitale and R. C. Gupta, "Product Design and Manufacturing", 3rd Edition, Prentice-Hall of India.


## Course outcome:

The course provides the student with a comprehensive view of the product development process, including basic skills in sketch techniques and understanding the importance of design as well as deeper skills in working with computer aided design.

On completion of the course, the student should be able to:

- describe the product development process and account for its conditions and terms, and use the most common methods of managing terms and concept development,
- use basic sketching techniques to communicate ideas, plan, implement and present a design project,
- use a CAD-software to design products with moving parts and with the help of top-down methodology, create advanced solid and surface models,
- produce realistic images and simple animations of a product and use a PDM/PLM-system to design products.

## Assessment:

5. Every student has to undergo periodic tests.
6. Assignments, seminars, practical exam and project work.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 03/09 /2018

**Sub:** Value-added Courses on "YOGA" from 10.09.2018 To 29.09.2018 - Reg.

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Here by all the B.Tech, VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "YOGA" from 10.09.2018 to 29.09.2018 (Every day at 04.00 PM to 06:00 PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 08/09/2018.

**Co-coordinators:**

1. Sri. R.Rama krishna Reddy, Associate Professor in ME

2. Sri. M.Mohan Reddy, Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2018-19

# YOGA

(Value Added Course)

VAC Coordinator**:** **Dr. D. Ravi Kanth**, Prof, Dept. of ME

VAC Instructors: 1) **Sri. R. Rama Krishna Reddy,** Assoc. Prof., Dept. of ME
**2) Sri. M. Mohan Reddy,** Asst. Prof, Dept. of ME

and

Resource person(s) from Industry

**1) Sri. M. Pradeep Kumar Reddy**

## Course Structure:

| Course | Class | No. of students (Max) | Duration |
|---|---|---|---|
| YOGA | IV B. Tech, VII Semester | 120 | Maximum of 30 hours |

## Prerequisite:

In this course has a specific prerequisite. However some familiarities with the following are especially helpful.

- Every day you should practice Yoga for at least 30 to 45 minutes to get maximum results.
- The best suited time to practice is early morning hours, but it can be practiced in the afternoon after following food restrictions.
- Food restrictions - stomach should be empty while practicing, that is you should consume solid food 3.5 hours before practicing and liquid 1 hour before.
- Place should be spacious, clean, airy, bright and away from disturbances. Yoga should not be practiced on bare floor but keep mat or carpet below.
- Clothes should be comfortable, loose, and clean. Undergarmentsare necessary.
- Yoga prefers vegetarian diet. But avoid spicy and hot diet as much as possible.
- One should have faith in Yoga and what he/she is doing.

## Course Objectives:

Yoga helps in self discipline and sel-control, leading to immense amount of awareness, concentration and higher level of consciousness.

- Promoting positive health, prevention of stress related health problems and rehabilitation through Yoga.
- Imparting skills in them to introduce Yoga for health to students for total personality development.
- Invoke scientific attitude and team spirit to channelise their energies in to creative and constructive endeavors.
- To enable them to establish Yoga Therapy centers in the service of common man.
- To possess emotional stability and integrate moral values.
- To attain higher level of consciousness.

## About YOGA:

Yoga is a group of physical, mental and spiritual practices which originated in ancient India. Yoga is one of the six orthodox schools of Hindu philosophical traditions. There is a board variety of YOGA schools, practices, and goals in Hinduism, Buddhism and Jainism. The term YOGA in the Western world often denotes a modern form of Hatha YOGA. YOGA as exercise, consisting largely of the postures called asanas. The origins of YOGA have been speculated to date to pre-Vedic Indian traditions; it is mentioned in the Rig-Veda, but most likely developed around the sixth and fifth centuries BCE, in ancient India's ascetic and sramana movements. The impact of postural YOGA on physical and mental health has been a topic of systematic studies, with evidence that regular YOGA practice yields benefits for low back pain and stress.

## Topics to be covered:

**Chapter-1** **[6 Hrs]**

**General Introduction to Yoga:**

Brief to origin of Yoga, History and Development of Yoga: Vedic Period, Classical Period, Post classical period, Modern Period. Etymology and Definitions of Yoga in classical Yoga texts. Meaning, Aim and Objectives of Yoga, Misconceptions about Yoga; True Nature of Yoga; Principles of Yoga; Basis of Yoga.

**Chapter-2** **[6 Hrs]**

**Streams of Yoga:**

Basic concepts of Bhakti Yoga, Jnana Yoga, Karma Yoga and Raja Yoga and Unity in Diversity

**Chapter-3** **[6 Hrs]**

**Hatha Yoga Practices: Shodhana-Kriyas and Asanas:**

Shodhana-kriyas, SHodhana-kriyas in Hatha Yoga Pradépika & in Gheranòa Samhita and their techniques, benefits and precautions; Role of SHodhana-kriyas in Yoga Sadhana and their importance in Modern day life; Yogasana: its' definition, Salient features and importance in Hatha Yoga Sadhana; Asanas in Hatha Yoga Pradépika and Gheranòa Samhita: their techniques, benefits, precautions and importance.

**Chapter-4** **[6 Hrs]**

**Hatha Yoga Practices: Pranayama, Bandhas and Mudras**

Pranayama – Machanism of correct breathing, Yogic deep breathing, Concept of Püraka, Kumbhaka and Recaka; The concept of Prana, Kinds of Prana and Upa-pranas, Pranayama and its importance in Hatha Yoga Sadhana, Nadishodhana Pranayama, its technique and importance, Pre-requisites of Pranayama; Pranayama practices in Hatha yoga pradépika and Gheranòa Samhita, their techniques, benefits and precautions, Hatha Siddhi Lakshanam; Bandhas and role of Bandhatrayas in Yoga Sadhana; Fundamental Mudras in HYP and G.S, Their techniques, benefits and precautions.

**Chapter-5** **[6 Hrs]**

**Hatha Yoga Practices: Pratyamhara, Nadanu Sandhana and Svarodaya Jnana**

Concept of Pratyahara, Dharana and Dhyana in Gheranòa Samhita and their techniques & benefits; Concept of Samadhi in Hatha-yoga Pradépika, Samadhi Lakshanam and Hatha Yoga Siddhi Lakshanam; The concept of Nada, Four Avasthas (stages) of Nadanusandhana, and its Siddhis; Svara, Importance of Svarodaya-jnana in Yoga Sadhana with special reference to Jnana Svarodaya and SHiva Svarodaya ; Introduction to Basic Hatha Yoga Texts: Basic Hatha Yogic Texts : their nature and objectives, Siddhasiddhantapaddhati, Goraksha Samhita, and Shiva Samhita, Hatha Pradeepika, Gheranda Samhita, brief introduction to Hatha Rathnavali.

**Total: 30 Hrs**

## Learning References:


4. Woods, J.H. : The Yoga System of Patanjali, M.L.B.D., Delhi, 1988
5. Swami Vivekananda: Rajayoga, Advaita Ashram, Culcutta, 2000
6. Iyengar B.K.S. : Light on Patanjal Yoga (New York, Schocken Books, 1994)
7. Swami Sri Omanandatirtha: Patanjala Yoga Pradeepa, Geeta Press, Gorakhapur, 1994

8. Swami Anant Bharati : Patanjali Yoga Shasta- a study (Hindi), Swami Keshwananda Yoga Sangthan, Delhi, 1982
9. Burley, Mikel: Hatha Yoga, Its' Context Theory and Practice (M.L.B.D. Delhi, 2000)
10. Ghosh, Shyam: The Original Yoga, Munshiram Manoharlal, New Delhi, 1999
11. Burnier, Radha: Hathayoga Pradipika of Svatmarama, The Adyar Library publications, Chennai. 2000
12. Woodroffe, Sir John: The Serpent power (Ganesh & Company, Madras, 2000)

## Course outcome:

- Transformation of students and research scholars to realize their inner potential
- Strengthening Physical and mental wellness
- Making students as creator rather scorer of marks
- Improves your flexibility and builds muscle strength
- Prevents cartilage and joint breakdown and protects your spine
- Betters your bone health and increases your blood flow
- It incorporates breathing exercises, meditation and poses designed to encourage relaxation and reduce stress.

## Assessment:

7. Every student has to undergo periodic tests.
8. At the end, each student has to give a presentation on a topic covered in this course.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 24/11/2018

**Sub:** Value-added Courses on "**Process Piping Fabrication**" from 03.12.2018 To 22.12.2018 - Reg.

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Here by all the B.Tech, VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Process Piping and Fabrication" from 03.12.2018 To 22.12.2018 (Every day at 04.00 PM to 06:00 PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 30/011/2018.

**Co-coordinators:**

1. Sri. U.Pradeep Kumar Assistant Professor in ME

2. Sri. B.Subbarayudu Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2018-19

# Process Piping and Fabrication

(Value Added Course)

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VAC Coordinator**:** **Sri. P. Sreenivas,** Prof., Dept. of ME

VAC Instructors**:** 1) **Sri. U. Pradeep Kumar,** Asst. Prof., Dept. of ME
**2) Sri. B. Subbarayudu,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry

**1) Sri. K. Raja Sekhar**

## Course Structure:

| Course | Class | No. of students (Max) | Duration |
|---|---|---|---|
| Process Piping and Fabrication | B. Tech, VII Semester | 120 | Maximum of 36 hours |

## Prerequisite:

In this course has a specific prerequisite. However some familiarities with the following are especially helpful.

- Students with a strong interest in products and design
- Bachelor of Technology in Engineering or consent of instructor.

## Course Objectives:

The course is targeted towards understanding process piping and fabrication. We emphasize learning by doing.

- Describe the responsibilities of piping field engineer.
- Describe the various phases of life cycle of piping process plants.
- Describe the functions and features of various piping components.
- Apply various codes and standard for piping in a given situation.
- Describe the process of surface preparation for painting and coating.

## About Process piping and fabrication:

This course focuses on different types of process piping fabrication work. This course helps to practice use of different tools, equipments and machineries applicable in piping fabrication. This includes hands on practice to student for deciding fundamental technical requirements in piping fabrications. This course also helps student to become conversant with related manufacturing codes and standards of process piping fabrication e.g. ASME, API, ASTM, ASI etc.

## Topics to be covered:

**Chapter-1** **[6 Hrs]**

**Introduction to Piping:**

Introduction to piping, Pipe classification, general definitions, length area, surface, volume, acronyms and abbreviation colour coding of piping. Concept of high point vent and low point vent drain. Duties and responsibilities of piping field engineer and role of field engineer in safety field craft supports/communications.

**Chapter-2** **[7 Hrs]**

**Life Cycle of Piping Process Plants:**

Introduction to the major phases of piping process plants. Feasibility study (techno-economical survey), design, construction commission/erection phase and operational/production phase.

**Chapter-3** **[6 Hrs]**

**Piping Components:**

Pipe and tube product, pipe sizes and materials, pipes joints, bending and valves. Strainers, traps, expansion joints, threaded joints, flanges, gaskets, fasteners, welded, brazed joint and joining ductile or cast iron pipes.

**Hanger and Supports (Restrain):**

Concept and function, classification/types of supports, pipe support material, oversized and slotted holes, bolting installation procedure, and hanger installation guide lines, calculation for pipe supports.

**Chapter-4** **[7 Hrs]**

**Piping Codes and Standards:**

Introductions of ASME codes, code case interpretation, introduction of ASME, Introduction of ANSI, Introduction of ASTM, introduction of API and introduction of AWS.

**Chapter-5** **[10 Hrs]**

**Pipe Drawing:**

Piping drawing symbols and abbreviations, types of drawing, introduction to simple piping drawing, plot plan, G. A. drawing, process flow diagram, piping and instrumentation, piping Isometric drawing and equipment lay-out.

**Pipe Coating and Insulation:**

Introduction and function, definition, types, surface preparation for coating and painting, painting as coating, terminology of painting, problems related to painting and coating, definition of insulation, classification of insulation and functions and objectives of insulation.

**Total: 36 Hrs**

## Learning References:


13. Sushil kumar srivastava; "Maintenance engineering and management", PHI learning Pvt.Ltd.
14. S. V. Nadkarni; "Modern arc welding", Oxford publication.
15. Mohinder L. Nayyar; "Piping/mechanical hand book", Peter H. O. Fischer, Manager, Pipeline operations, Bechtel.


## Course outcome:

On completion of the course, the student should be able to:

- Describe the responsibilities of piping field engineer.
- Use pipes standard tables for different calculations.
- Describe the functions and features of various piping components/Element
- Apply various codes and standard for piping in a given situation.
- Measure pressure in pipes and explain precautions to be taken in piping fabrication to minimize loss in head due to flow of fluid through piping.
- Interpret and use various simple piping drawings in a given situation.
- Plan and supervise process of surface preparation and painting/coating.
- Perform the process of pipe shaping, bending and forming.

## Assessment:

9. Every student has to undergo periodic tests.
10. Assignments, seminars and project work.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 24/01/2019

**Sub:** Value-added Courses on **"Industrial Automation and Robotics"** from 04-02-2019 to 23-02-2019-Reg.

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Here by all the B.Tech VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Industrial Automation and Robotics" from 04.02.2019 To 23.02.2019 (Every day at 04.00 PM to 06:00 PM).

Students those who are interested to participate in the above workshop may register their names with the following staff on or before 02/02/2019.

**Co-coordinators:**

1. Sri. U. Pradeep Kumar, Associate Professor in ME

2. Sri. M. Mohan Reddy, Assistant Professor in ME

Sd/-xxxxx

PRINCIPAL

# 2018-19

# Industrial Automation and Robotics

(Value Added course)

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VAC Coordinator**:** **Dr. K. Raja Gopal,** Prof., Dept. of ME

VAC Instructors**:** **1) Sri. P. Sreenivas,** Asst. Prof., Dept. of ME
**2) Sri. S. Mallikarjuna Reddy,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry
**1) T. Rajendra Prasad**

## Course Structure:

| Course | Class | No. Of Students (Max) | Duration |
|---|---|---|---|
| Industrial Automation and Robotics | B. Tech VII Semester | 120 | Maximum of 40 hours |

## Pre-requisites:

- Clare and Focused approach.
- A technical bent of mind, not necessarily any programming language.
- Experience in programming would really help.
- Understand that career in RPA is a journey which means that learning RPA tools would take you through around 3-4 years. There is more to learn.

## Course Objectives:

Automation is the control of machines and processes by independent systems through the use of various technologies which are based on computer software or robotics. Industry implements automation to increase productivity and reduce labor costs. After completing this course user will be able to:

- To develop the student's knowledge in various robot structures and their workspace
- To develop student's skills in performing spatial transformations associated with rigid body motions and robot systems

- To provide the student with knowledge of the singularity issues associated with the operation of robotic systems
- To provide the student with some knowledge and analysis skills associated with trajectory planning and robot control

## About Industrial Automation and Robotics:

Industrial automation is the use of control systems, such as computers or robots, and information technologies for handling different processes and machineries in an industry to replace a human being. It is the second step beyond mechanization in the scope of industrialization.

## Topics to be covered:

**Chapter 1** **5hrs**

***Introduction:***

Concept and scope of automation: Socio economic impacts of automtion, Types of Automation, Low Cost Automation.

***Fluid Power:***

Fluid power control elements, Standard graphical symbols, Fluid power generators, Hydraulic and pneumatic Cylinders-construction, design and mounting; Hydraulic and pneumatic Valves for pressure, flow and direction control.

**Chapter 2:** **6hrs**

***Basic hydraulic and pneumatic circuits:***

Direct and Indirect Control of Signal/Double Acting Cylinders, designing of logic circuits for a given time displacement diagram and sequence of operations, Hydraulic and Pneumatic Circuits using Time Delay Valve and Quick Exhaust Valve, Memory Circuit and Speed Control of a Cylinder, Troubleshooting and Causes and Effect of Malfunctions. Basics of Control Chain, Circuit Layouts, Designation of specific Elements in a Circuit.

***Fluidics:***

Boolean algebra, Truth Tables, Logic Gates and Coanda effect.

**Chapter 3:** **9hrs**

***Electrical and Electronic Controls:***

Basics of Programmable logic controllers (PLC), Architecture and Components of PLC and Ladder Logic Diagrams.

**Chapter 4:** **10hrs**

***Transfer Devices and feeders:***

Classification, Constructional details and Applications of Transfer devices, Vibratory bowl feeders, Reciprocating tube and Centrifugal hopper feeders.

**Chapter 5:** **10hrs**

***Robotics:***

Introduction, Classification based on geometry, control and path movement, Robot Specifications, Robot Performance Parameters, Robot Programming, Machine Vision, Teach pendants and Industrail Applications of Robots.

**Total Hrs: 40**

## Learning Resources and References:

These are some of the links and books which can help students in increasing their knowledge base and clarification of the doubts. Please visit the links and refer the books to explore the information given:


[30] S. R. Majumdar, Pneumatic Control, McGraw Hill

[31] S. R. Deb, Robotic Tehnology and Flecible Automation, Tata Mc Hill

[32] Saeed B. Niku. Introduction to Robotics, Wiley India.

[33] Performance Modeling of Automated Manufacturing Systems,-Viswanandham, PHI, 1st edition, 2009.


**Course outcomes:** By the end of this course, the student will be able to

- Students will demonstrate knowledge of the relationship between mechanical structures of industrial robots and their operational workspace characteristics.
- Students will demonstrate an ability to apply spatial transformation to obtain forward kinematics equation of robot manipulators.
- Students will demonstrate an ability to solve inverse kinematics of simple robot manipulators.
- Students will demonstrate an ability to obtain the Jacobian matrix and use it to identify singularities.

## Assessment:

- Every student has to give periodic tests consisting of Objective Questions.
- At the end of the course each student will give a design and will be submitted.

**KSRM COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**
**Department of Mechanical Engineering**

CIRCULAR

Date: 22/02/2019

**Sub:** Value-added Courses on "**Computer Aided Analysis and Simulation**" from 04.03-2019 To 23.03.2019 - Reg.

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Here by all the B.Tech, VII Semester Mechanical Engineering students are informed that Department is going to conduct Course on "Computer Aided Analysis and Simulation" from 04.03-2019 To 23.03.2019 (Every day at 04.00 PM to 06:00 PM).

The students those who are interested to participate in the above workshop may register their names with the following staff on or before 27/02/2019.

**Co-coordinators:**

1. Sri. T. V. V. S. N. Murti, Associate Professor in ME

2. Sri. S. Mallikarjuna Reddy, Assistant Professor in ME

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PRINCIPAL

# 2018-19

# Computer Aided Analysis and Simulation

(Value Added Course)

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VAC Coordinator**:** **Dr. K. Raja Gopal,** Prof., Dept. of ME

VAC Instructors**:** **1) Sri. T. V. V. S. N. Murti,** Assoc. Prof., Dept. of ME
**2) Sri. S. Mallikarjuna Reddy,** Asst. Prof., Dept. of ME
and
Resource person(s) from Industry

**1) Dr. D. Krishna Mohan Raju**

## Course Structure:

| Course | Class | No. of students (Max) | Duration |
|---|---|---|---|
| Computer Aided Analysis and Simulation | B. Tech, VII Semester | 120 | Maximum of 30 hours |

## Prerequisite:

Learning concepts of strength of materials, machine design and computer aided engineering.

## Course Objectives:

To make students understand and learn about the analysis and simulation of simple mechanical parts through software and the solving techniques of various engineering problems.

- To impart the fundamental knowledge on using various analytical tools like ANSYS, FLUENT, etc., for Engineering Simulation.
- To know various fields of engineering where these tools can be effectively used to improve the output of a product.
- To impart knowledge on how these tools are used in Industries by solving some real time problems using these tools.

## About Computer Aided Analysis and Simulation:

ANSYS offers a comprehensive software suite that spans the entire range of physics, providing access to virtually any field of engineering simulation that a design process requires. Organizations around the world trust ANSYS to deliver the best value for their engineering simulation software investment.

Simulation-driven product development takes engineering simulation to another level. The unequalled depth and breadth of our software coupled with its unmatched engineered scalability, comprehensive multiphysics foundation and adaptive architecture set our technology apart from other CAE tools. These ANSYS advantages add value to the engineering design process by delivering efficiency, driving innovation and reducing physical constraints, enabling simulated tests that might not be possible otherwise.

## Topics to be covered:

**Chapter-1** **[5 Hrs]**

**INTRODUCTION TO FEA AND ANSYS:**

Introduction to FEA, Key Assumptions in FEA, Types of Analysis, Important terms and Definitions, Setting the Analysis Preferences, Units in ANSYS, Exiting ANSYS, Self-and Evaluation Test.

**Chapter-2** **[5 Hrs]**

**BASIC SOLID MODELING:**

Solid modeling in ANSYS, Solid modeling methods, Considerations before creating a model for analysis, creating geometric entities, creating and modifying work planes and coordinate systems in ANSYS.

**Chapter-3** **[5 Hrs]**

**ADVANCED SOLID MODELING**

Advanced Solid Modeling, Creating complex solid models by performing boolean operations, modifying the solid model, Deleting solid model entities, importing solid models, importing the IGES file, importing models from Pro/ENGINEER and importing the model from unigraphics.

**Chapter-4** **[5 Hrs]**

**FINITE ELEMENT MODELING:**

An overview of the Finite element modeling, element attributes, real constants, material properties, multiple attributes, assigning multiple attributes before meshing, assigning default attributes before meshing, modifying attributes after meshing, verifying assigned attributes and element attributes table.

**THERMAL ANALYSIS:**

Thermal analysis, important terms used in thermal analysis, types of thermal analysis and performing steady-state thermal analysis.

**Chapter-5** **[10 Hrs]**

**SOLUTION AND POSTPROCESSOR:**

Solution, defining the new analysis type, restarting the analysis, setting solution controls, setting analysis options, solving the analysis problem and post processing the result.

**GENERATING THE REPORT OF ANALYSIS:**

Starting the ANSYS report generator, capturing images, animations, tables and lists for the report, compiling the report and changing the default settings of the ANSYS report generator. Error estimation in solution, percentage error in energy norm, element energy error, and element stress deviations, maximum and minimum stress bounds.

**Total: 30 Hrs**

## Learning References:


16. https://www.ansys.com/academic/terms-and-conditions
17. https://www.featuredcustomers.com/vendor/ansys/testimonials
18. https://www.featuredcustomers.com/vendor/ansys
19. http://research.me.udel.edu/~lwang/teaching/MEx81/ansys56manual.pdf
20. https://www.afs.enea.it/project/neptunius/docs/fluent/html/ug/node971.htm
21. https://www.afs.enea.it/project/neptunius/docs/fluent/html/ug/node332.htm


## Course outcome:

On completion of the course, the student should be able to:

- Learn ANSYS-Analysis Software/Any analysis software.
- Have a good grip on simulations of the models any of the analysis software.
- The student will be able to appreciate the utility of the tools like ANSYS or FLUENT in solving real time problems and day to day problems.

- Use of these tools for any engineering and real time applications.
- Acquire knowledge on utilizing these tools for a better project in their curriculum as well as they will be prepared to handle industry problems with confidence when it matters to use these tools in their employment.

## Assessment:

11. Every student has to undergo periodic tests.
12. Assignments, seminars, practical exam and project work.