



**MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)**  
UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH,  
Hyderabad). Accredited 2<sup>nd</sup> time by NAAC with 'A' Grade,  
Maisammaguda (H), Medchal-Malkajgiri District, Secunderabad,  
Telangana State – 500100, [www.mrec.ac.in](http://www.mrec.ac.in)

Ref /MREC/CE/VCA/2016/01

Department of Civil Engineering

CIRCULAR

Date:6/12/2016

All the students are hereby informed that Value Added Courses on “**Training Program on ETABS**” on date 12<sup>th</sup> December 2016 to 18<sup>rd</sup> January 2017 ,is being organized by the Civil engineering department . The resource person for the course is Dr. Srinivas Reddy

Students are advised to register their names to the programme coordinator “**B.Vamshi**” on or before 11<sup>th</sup> December and utilize this opportunity to hence their skills by attending the programme.

The detailed schedule of the programme will be displayed in the notice board.

HOD/CE

Copy to

- 1) Circulation in student classroom
- 2) All HOD'S
- 3) Notice boards
- 4) PA to Principal for filling



*Raush*  
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(Autonomous)  
Maisammaguda, Dhulapally,  
(Post Via Kompally), Sec'bad-500 100



**Advisory Committee:**

**Chief Patrons:** Sri. Ch. Malla Reddy,  
Founder Chairman  
Malla Reddy Group of Institutions

**Patrons:** Sri.Ch. Mahender Reddy  
Secretary, MRGI  
Dr.Ch.Bhadra Reddy  
President, MRGI

**Co-Patrons:** Dr. Sudhakar Reddy  
Principal, MREC (A)

**Convener:** Dr. M. Kameswara Rao  
HOD CIVIL

**Coordinator:** Mr. B.Vamshi Krishna  
Assistant Professor, CIVIL

**Organizing Committee:**

Dr.J. Selwyn Babu, Professor, Civil  
Dr.C.Srinivas Gupta, Professor, Civil  
Dr.P.Saritha, Associate Professor, Civil  
Dr.R. Prasanna Kumar, Professor, Civil  
Dr.G.Suresh, Associate Professor, Civil  
E.Rakesh Reddy, Assistant Professor, Civil  
A. Naga Saibaba, Assistant Professor, Civil  
R. Sumathi, Assistant Professor, Civil  
K. Harshada, Assistant Professor, Civil  
B. Vamsi Krishna, Assistant Professor, Civil  
K. Naga Sujatha, Assistant Professor, Civil  
Ch. Sanjeeva Sagar, Assistant Professor, Civil  
C.Naga Chaitanya, Assistant Professor, Civil  
A. Vinod Reddy, Assistant Professor, Civil

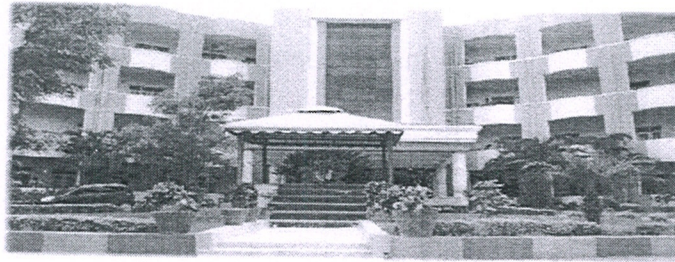


*A Thirty Two Hour Skill development Course  
(Value added Course)*

*On*

**“Training Program on ETABS”  
(12<sup>th</sup> December, 2016 to 18<sup>th</sup> January, 2017)**

**In Association with**

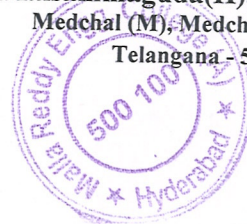


*Organized by*

**Department of Civil Engineering  
MALLA REDDY ENGINEERING COLLEGE  
(AUTONOMOUS) MAIN CAMPUS**

**An UGC Autonomous Institution, Approved by  
AICTE & Affiliated to JNTUH-Hyderabad  
Reaccredited by NAAC with ‘A’ Grade, (II Cycle)**

**Maisammaguda(H), Gundlapochampally (V),  
Medchal (M), Medchal - Malkajgiri District  
Telangana - 500100, India.**



**Registration Form:**

*A Thirty Two Hour Skill development Course  
(Value added Course)*

*On*

**“Training Program on ETABS”  
(12<sup>th</sup> December, 2016 to 18<sup>th</sup> January, 2017)**

1.Name.....

2.Roll No.....

3.Department.....

4.Mailing address.....

5.Mobile.....

6.Email.....

**Signature of the Applicant**

**Date:**

**Place:**

**This is to certify that**

**Mr/Ms.....of.....**

**Is sponsored to attend the Value Added  
Course**

**Signature of the Institution with Seal**

**Date:**

**Place:**



## About the Institution

**Malla Reddy Engineering College (Autonomous)** is one of the reputed engineering colleges in Hyderabad, Telangana. **MREC(A)** is part of Malla Reddy Group of Institutions (MRGI), founded by Sri. Ch.Malla Reddy. The college is situated in a serene lush green environment in Maisammaguda, Gundlapochampally, Medchal(M), Mechal-Malkajgiri District, Telangana-500100.

The college was established in 2002 and is an autonomous institution approved by UGC and affiliated to JNTUH. The college is re-accredited by NAAC with 'A' Grade (II Cycle) and was conferred autonomous status by JNTUH in 2011 and by UGC in 2014 for a period of 6 years. Our eligible UG and PG programs received NBA accreditation and some of them received reaccreditation too. Along with programs in various streams of Engineering & Technology and Management. It boasts of world-class infrastructure and well-equipped laboratories in all departments and is skillfully and smartly guided by **Dr. Sudhakar Reddy, Principal, MREC(A)** who have a rich teaching and industrial experience.

## About the Department:

The Department of Civil Engineering at MREC has been producing high quality technical manpower needed by industry, R&D organizations, and academic institutions since 2004 with an Intake of 60. The intake has been

increased to 120 in the year 2009 and 180 in the year 2014. The Department started offering M.Tech with Structural Engineering specialization in 2010 with an intake of 18, two more courses at P.G level- geotechnical engineering and transportation engineering are being offered from the academic year 2013-2014 with an intake of 24 each. The department was accredited by NBA in the year 2014.

## Overview of the Programme:

The primary responsibility of student is not only to study towards a higher vision but also create a strong sense of bonding between the institution and the students to nurture a stress-free holistic environment. To enhance the quality of life for the students enabling them to introspect and learn techniques that imbibe ethics & morals in their teaching and help pre-prepare students for active and successful participation in a modern society, producing individuals of high character, probity and honor.

Proposed VAC is helping to imbibe the skills and competencies required to achieve goals directed by values, to maintain and enhance faculty effectiveness by inculcating dynamism and leadership qualities and to develop commitment and ethical approach towards work, and instill a sense of responsibility towards the institution. Also to enhance communication and soft skills, by introducing innovative teaching methodologies and developing an inter-personal connection with students. To achieve this goal,

Art of Living foundation is conducting this workshop through ATAL.

## Objectives of the Programme:

- To imbibe the skills and competencies required to achieve goals directed by values.
- To maintain and enhance student effectiveness by inculcating dynamism and leadership qualities.
- To develop commitment and ethical approach towards work, and instill a sense of responsibility towards the companies.
- To enhance communication and soft skills of the students by introducing innovative methodologies and developing an interpersonal connection.

## Topics to be covered:

- ❖ Modeling on structural systems
- ❖ Loading, analysis and design

## Test and Certificate:

A test will be conducted at the end of the program and the certificates shall be issued to those participants

## Outcome of the Program:

After completing the Course, the student will itself feel the difference in terms of:

- Enhanced Potential, Fair-mindedness
- Empathetic behavior & Optimistic attitude
- Dynamism, Commitment and Confidence
- Ethical Leadership & Risk taking ability.



## MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Maisammaguda, Dhullapally (post via Kompally) Secunderabad-500100

Department of Civil Engineering

Syllabus on

### “TRAINING PROGRAM ON E-TABS SOFTWARE ”

Session - 1 Brief Introduction and concepts of analysis and design E T A B S: - Extended three dimensional analysis of Building System. Founded by a company called CSI CSI: Computers and Structures INC Initially the ETABS software was just a program and was developed by a group of people (Masters Students) in the year of 1975. Later an official copy of integrated analysis and design software was released in the year of 1985. Case Study: - 1st Project worked out using ETABS was Burj Khalifa, ETABS was used to make the mathematical model of Burj Khalifa. (Total height 828m) The following are the products of CSI SAP 2000• CSI BRIDGE• ETABS• SAFE• PERFORM - 3D• CSICOL• Structural analysis and design concepts More than to say structural analysis and design it could be called as an art, An art that has got a history as good as the origin of human beings on this earth. In due course of civilization for the progressive well being of mankind. One of the best examples for this art is the construction of pyramids of Egypt in the late 2000 years B.C. which is still a testimony for the modern day architects and designers. Structural analysis and design in today's world 1. Load acting on the structures is ultimately transferred to ground. 2. In the process of load transferring, various components of the structures are subjected to internal stress and strain.  $\text{Stress} = \text{LOAD (P)}/\text{AREA (A)}$  &  $\text{strain} = \text{CHANGE IN LENGTH } (\Delta L)/\text{ORIGINAL LENGTH (L)}$  1 3. For example load acting on a building will be transferred to ground in the following path-way. Slabs > Beams > Column > Footing > Ground Definitions Structural Analysis: - Applying the loads on a structure and assessing the internal stress in the components of a structure is known as structural analysis e.g:- SFD & BMD Structural Design: - Based on the analysis results finding the suitable size or cross section of a particular type of structural component is known as design of structures . e.g:- Depth and amount of steel Type of Structures 1. Masonry 2. R.C.C 3. Steel Or combination of all the above and is often called as Composite Structures. Types of structural analysis wise 1. Deterministic Structures: - Structures that could be analysed by using static equilibrium equations are known as deterministic structures. The following are the static equilibrium equation:-  $\sum m = 0$ •  $\sum H = 0$ •  $\sum V = 0$ • e.g:- Consider Simply supported beam with UDL No., of unknowns is two  $V_A$  and  $V_B$  No., of SEE is 3 Therefore we can solve it manually and Hence it is a deterministic structure. 2 2. Indeterminate Structures:- Structures that cannot be analysed with the help of Static equilibrium equation alone is known as indeterminate structures. (This



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type of indeterminate structures are often analysed by matrix method or FEM modulation) e.g:- No., of unknowns is 4 (VA, VB, VC & VD) No., of SEE is 3 ( $\sum m = 0$ ,  $\sum H = 0$ ,  $\sum V = 0$ ) So it cannot be solved with the simple manual calculation, it needs complex method of analysis like Matrix method of structural analysis or we can also solve this in Staad-Pro or ETABS, and hence structure like this are called as Indeterminate structures. Types of Supports:- 1. Simple Support 2. Roller Support 3. Hinged or pinned Support 4. Fixed Support Types of Beams:- 1. Cantilever beam 2. Simply supported beam 3. Overhang beam 4. Propped cantilever 5. Continuous B

Basic Analysis Terms & Examples Shear Force: The summation of all the vertical forces either to the right or left side of a beam is called shear force. And the representation of this shear force is known as a shear force diagram (SFD). Bending moment: The summation of all the moments either to the left or right side of the beam is known as a bending moments. And the diagram which represents these moments is known as bending moment diagram (BMD)

Types of Co-ordinate systems:- 1. Global Co-ordinate system: - The Co-ordinate system for entire structure is known as Global co-ordinate system.

How to start a software ETA BS 2015 1. Double click on the software icon on the desktop 2. Waite 3. File > New Model or Short cut is (Ctrl + N). 4. Use built-in settings .



*Ravi*  
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Maisammaguda (H), Medchal-Malkajgiri District, Telangana State – 500100

**VAC ENROLLED LIST**  
**TRAINING PROGRAM ON ETABS**  
12<sup>th</sup> December 2016 to 18<sup>th</sup> January 2017

Sl.No	Roll No	Name
1	14J41A0101	ARJA RAM CHARAN
2	14J41A0102	A SURESHGOUD
3	14J41A0103	ABDUL AZAD MOHAMMED
4	14J41A0104	ANJALI KANODIA
5	14J41A0105	ANKANNAGARI ANIL GOUD
6	14J41A0107	BHUKYA PRAVEEN KUMAR
7	14J41A0108	CHAPATI LAKSHMI NARAYANAMMA
8	14J41A0109	CHILUKA GNANA DEEPIKA
9	14J41A0110	DARPANEEDI HARSHAVARDHAN
10	14J41A0111	DEVAGUPTAPU NAGA CHAITANYA
11	14J41A0113	DEVI SREEKANTH REDDY
12	14J41A0114	DHARAVATH SWARUPA
13	14J41A0115	DUBBAKA KARTHIK
14	14J41A0116	EDLA PRASHANTH
15	14J41A0117	GANGARAPU TEJESWARI
16	14J41A0118	GARIPALLY SAIRAM
17	14J41A0119	GOPISHETTY ROHITH
18	14J41A0120	GUGLAVATH SHIVA NAIK
19	14J41A0121	GUNTAKANDLA RAKSHITHA
20	14J41A0122	JANGAM YASWANATH KUMAR
21	14J41A0123	KODIMELA ABHIRAM
22	14J41A0124	KUNAPAREDDY VINESH
23	14J41A0125	KAALUVA SRAVYASRI
24	14J41A0126	KAMINENI ANISH KUMAR
25	14J41A0127	KERADI ANUSHA
26	14J41A0128	KOMMIDI RAGHUVEERA REDDY
27	14J41A0129	KOPPELA RAKESH
28	14J41A0130	KORE SAIKRISHNA
29	14J41A0134	MANDA SHRAVAN
30	14J41A0135	MARRIPELLI SURYAM
31	14J41A0197	MOMIN SAIF ALI
32	14J41A0198	MUDDU KRANTHI KUMAR
33	14J41A0199	MULKA RAVI DAS




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34	14J41A01A0	NALLA NIKHIL REDDY
35	14J41A01A1	NALURI SAGAR
36	14J41A01A2	NITIN DIWEDE
37	14J41A01A3	PALLE NARESH KUMAR REDDY
38	14J41A01A4	P RAHUL
39	14J41A01A5	PUDATHU ROHAN KUMAR
40	14J41A01A6	POTHIREDDYPALLY ISAAC NISSY
41	14J41A01A7	RYALA VIJAYANAND REDDY
42	14J41A01A8	SHILAGANI ARUN KUMAR
43	14J41A01A9	S PRATYUSHA NAIDU
44	14J41A01B0	SABBANI VINAY
45	14J41A01B1	SADDI HIMABINDU
46	14J41A01B2	SAI SWAPNIL
47	14J41A01B3	SIRANGI SRIKANTH
48	14J41A01B4	SRIRAMULA SRINATH
49	14J41A01B5	THANNERU AYYAPPA
50	14J41A01B6	THORRIKONDA VENKATESH
51	14J41A01B7	THOTA GOPI CHAND
52	14J41A01B8	PHANENDAR REDDY V
53	14J41A01B9	VEMULA RAVI
54	14J41A01C0	VINODH KUMAR KENCHU
55	14J41A01C1	ARJA SAI RAKESH
56	14J41A01C3	ADEPU RAMYAKRISHNA
57	14J41A01C4	ADLA ANVESH
58	14J41A01C6	ANUJ KUMAR JANGID
59	14J41A01C7	ANUSHA MATYADA
60	14J41A01C9	BOLLA RAJA SEKHAR REDDY

  
HOD/CE



  
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Maisammaguda (H), Medchal-Malkajiri District, Telangana State – 500100

**DEPARTMENT OF CIVIL ENGINEERING**  
ACADEMIC YEAR: 2016-17  
SUMMARY REPORT

**Value Added course name:** Training Program on ETABS

**Value Added course Instructor:** Dr. Srinivas Reddy

E-Tabs software automatically populates charts, graphs and reports in PowerPoint, Excel, Word and HTML. Their products and services are used in market research as research projects often involve reporting work. Automating charts, graphs and reports improves accuracy and prevents time and resources being wasted on data entry.



  
**Co-Ordinator**

  
**HOD**

  
**Principal**  
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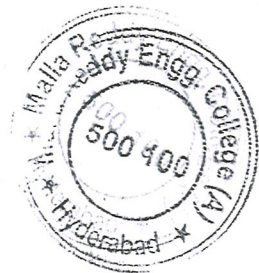
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## CERTIFICATE OF COMPLETION

This is to certify that Mr./Ms. ARJA RAM CHARAN bearing  
Roll No. 14J41A0101 has successfully completed Certificate / Value Added  
Course / Workshop in Training Program on ETABS conducted  
by the Department of Civil Engineering from 11/12/2016 to 18/01/2017

T.S.V  
COORDINATOR



*[Signature]*

HOD

*Ramesh*  
Principal  
Malla Reddy Engineering College  
Maisammaguda, Dhulapally,  
(Post Via Kompally), Sec'bad-500100;

*[Signature]*  
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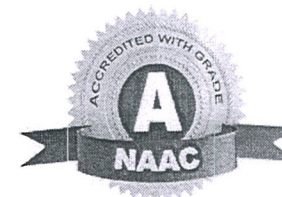


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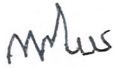


## CERTIFICATE OF COMPLETION


This is to certify that Mr./Ms. A SURESHGOUD bearing  
Roll No. 14J41A0102 has successfully completed Certificate / Value Added  
Course / Workshop in Training Program on ETABS conducted  
by the Department of Civil Engineering from 11/12/2016 to 18/01/2017

  
COORDINATOR



  
HOD

  
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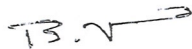
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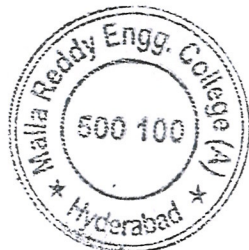
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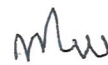



## CERTIFICATE OF COMPLETION

This is to certify that Mr./Ms. ABDUL AZAD MOHAMMED bearing  
Roll No. 14J41A0103 has successfully completed Certificate / Value Added  
Course / Workshop in Training Program on ETABS conducted  
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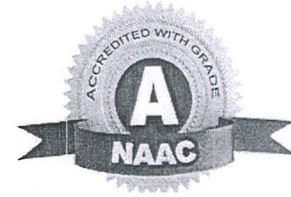


# MALLA REDDY ENGINEERING COLLEGE

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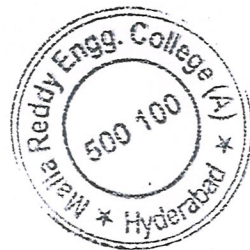
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## CERTIFICATE OF COMPLETION

This is to certify that Mr./Ms. ANJALI KANODIA bearing  
Roll No. 14J41A0141 has successfully completed Certificate / Value Added  
Course / Workshop in Training Program on ETABS conducted  
by the Department of Civil Engineering from 11/12/2016 to 18/01/2017

13.2  
COORDINATOR



HOD

*Reenukh*  
Principal  
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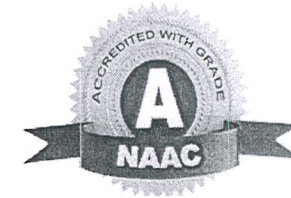


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## CERTIFICATE OF COMPLETION

This is to certify that Mr./Ms. ANKANNAGARI ANIL GOUD bearing Roll No. 14J41A0145 has successfully completed Certificate / Value Added Course / Workshop in Training Program on ETABS conducted by the Department of Civil Engineering from 11/12/2016 to 18/01/2017

T.B.V  
COORDINATOR



M.R.  
HOD

Raush  
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J.P.  
PRINCIPAL  
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