# COURSE OVERVIEW

Steel is one of the major construction materials used all over the world. It has many advantages over other competing materials such as high strength to weight ratio, high ductility (hence its suitability for earthquake resistant structures), uniformity, and its ability to be fully recyclable. The latest Indian Standard code of practice for general construction using hot-rolled steel sections (IS 800-2007) has been released in February 2008. This third revision of the code is based on the limit state method of design which is completely different from the earlier version of the code i.e. working stress method (IS 800-1984). Moreover, it is observed that many faculty members teaching steel structures in UG programme of AICTE recognized institutes are not very much familiar to this latest revision yet and facing difficulties in teaching. Therefore, they need to keep themselves abreast with the latest codal provisions in steel structural design.

A faculty member with well conversant of IS: 800 – 2007 (latest version) can teach their students with clear concept of the above codal provisions so that the students can adopt the latest codal provision for safe and economical design of steel structures. Finally, the above students can be able to carry out safe design with the revised code when they will join industry after completion of UG/PG course.

At present scenario, the faculty members of engineering institutions are actively involved in the industrial consultancy. This training programme will be of immense help in delivering the safe and economical designs to the industry with the latest revised codal provisions.

# **OBJECTIVES**

Current proposal is to conduct the "Refresher Course on Design of Steel Structures using IS: 800-2007" for faculty members, PG and PhD students of all AICTE affiliated Engineering Colleges/Universities in India in order to upgrade their knowledge of design of steel structures with reference to the revised code.

The objectives of proposed course are (i) to explain to the participants the behavior of various elements of steel structures giving importance on post elastic analysis and to provide the basis for the codal rules, (ii) to provide ample examples so that the participants understand the concepts clearly, (iii) to give information on latest developments.

# COURSE CONTENTS

Module 1: Basis of Structural Design

Module 2: Connections (Bolted and Welded)

Module 3: Design of Tension Members

Module 4: Design of Compression Members, Slab

Base & Gusseted Base

Module 5: Design of Beams

Module 6: Design of Plate Girders

Module 7: Design of Beam-Columns

# **RESOURCE PERSONS**

Faculty members from VSSUT, Burla and other institutions of national repute will deliver the lecturers.

#### **VENUE**

The course will be held during June 18- July 01, 2012 at Veer Surendra Sai University of Technology, Burla, Odisha, India. Burla is one of the well developed Industrial townships. Burla is situated very close to one of the longest earthen dam in the world known as the Hirakud Dam. It is well connected by railway network to the rest of India via Sambalpur. The VSSUT campus is about 8 km from Sambalpur Railway station.

# **IMPORTANT DATES:**

Last date of Submission of duly filled in Application/Registration form: 01-06-2012 (Friday)

# **PARTICIPANTS**

Faculty members, PG and PhD students from AICTE approved Institutions and Engineers/Officers from various Govt./ Private organisations or undertakings with Bachelor's Degree in Civil Engg or any such degree related to Design of Steel Structures are eligible to attend.

# **ACCOMODATION**

Accommodation for participants shall be arranged in the University Guest House depending on the availability. However, the accommodations shall be provided to the participants in the students Hostels.

# TA FOR PARTICIPANTS

The participants from AICTE approved institutions will be provided to and fro AC-III train fare/ bus fare through shortest route. The reimbursement of TA will be made as per AICTE guidelines such as production of necessary travel documents. The participants from industry have to make their own travel arrangement.

#### **REGISTRATION FEE**

There is no registration fee for the faculty members; PG and PhD students of AICTE approved institutions as the course is fully sponsored by the AICTE, New Delhi. The participants from industry are required to pay a course fee of Rs. 5000/- in the form of demand draft in favour of CEP FUND, VSSUT, Burla payable at SBI Burla (Code 2034).

# "REFRESHER COURSE ON DESIGN OF

STEEL STRUCTURES USING IS: 800-2007"

June 18 – July 01, 2012

# (Under Staff Development Programme) Sponsored by AICTE, New Delhi

#### REGISTRATION FORM

(Please fill in capital letter)

Name:
Organization:
Designation:
Mailing Address:
PIN
Phone: (Office):
(Residence)
Cell:
Fax:
Email:
Teaching Experience:
Accommodation Required:(Yes/No)
Signature:
Date
Sponsorship Certificate
On the event of selection, Prof/Dr//Mr./Ms
will be relieved for participation of the
above programme.
SIGNATURE OF THE HEAD OF THE
DEPARTMENT/INSTITUTE (WITH DATE & SEAL)

# **IMPORTANT NOTES**

The filled in registration form should reach the coordinator on or before 01.06.2012 (Friday).

The applicants will be informed about their participation by 07.06.2012 (Thursday).

The selected participants are requested to bring a calculator with them for tutorial classes.

Please visit our website www.vssut.ac.in for downloading registration form and other details.

# **Contact Addresses of Coordinators:**

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# REFRESHER COURSE ON DESIGN OF STEEL STRUCTURES USING IS: 800-2007

June 18 - July 01, 2012

(Under Staff Development Programme)

**Sponsored by** 

All India Council of Technical Education

**New Delhi** 

Coordinators Prof. Amar Nath Nayak Dr. Sanjaya Kumar Patro

Organized by



Department of Civil Engineering VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY (Formerly UCE Burla) Burla, Sambalpur, Odisha – 768018