

SCOPE & OBJECTIVES

Materials play a leading role in the development of technology. Composite materials have come a long way now-a-days to replace conventional materials with an advanced properties like light weight, high strength and low cost with a wide application area covering from household, sports, automobile sectors to aerospace industries. Composites also provide design flexibility because many of them can be moulded into complex shapes. This course will cover both basic and advanced concept on synthesis, processing and characterization of composite materials for advanced applications.

In this course, emphasis will be given on the Acquaintance with modern engineering materials for effective and economic industrial use, to learn applicability of new classes of composite materials, to learn new techniques in manufacturing and characterization of composite material, development research ideas leading to new material development, Study and optimize material composition for optimal industrial use.

COURSE CONTENT

- Introduction to materials (Metals & alloys, ceramics, composites)
- Overview of processes for synthesis of composite materials
- Processing, characterization and properties of light weight and high strength materials
- Machining aspects of composites
- Role of shape, size and structure in material properties
- Structure-property co-relation (XRD, SEM, TEM, FTIR, AFM)
- Applicability of recent developed materials and Shape memory alloys

SPEAKERS

The course lectures shall be delivered by the faculty members of VSSUT, Burla and eminent speakers invited from NITs, IITs and other premier institutions of India.

COURSE MATERIALS

Each registered participant will be provided with a set of comprehensive lecture notes.

ABOUT US

Veer Surendra Sai University of Technology (VSSUT) Odisha was formed by Odisha Act 9 of 2009 by upgrading University College of Engineering (UCE), Burla to a non-affiliating Unitary State University which came into force from 1st day of July 2009. The University has eleven departments covering all the major engineering, science and humanities disciplines, offering B.Tech., B.Arch., M.Tech., M.Sc. and Ph.D. programmes. VSSUT is located at the foothill of Hirakud Dam – World's longest dam. Burla is known as Intellectual capital of Odisha with VSSUT, Sambalpur University, VSS Institute of Medical Science and Research, Chipilima Agriculture College and Indian Institute of Management – all within a radius of 15 KMs. VSSUT is surrounded by metal and power industries and is referred as Odisha's "Growth Corridor". VSSUT campus is about 10 kms from Sambalpur railway station. Weather in Burla in December will be very pleasant. Light woolen clothes may be required.

Department of Mechanical Engineering was established in the year 1956 with a vision to explore new methods of teaching and research. During last 5 decades, this branch has produced high standard and self motivated professionals to serve the humanity both nationally and internationally at par excellence. This short term course is also well supported by Department of Metallurgy and Materials Engineering which is recently being established.

Veer Surendra Sai University of Technology Burla, Odisha

QIP Short Term Course

on

Advanced Materials: Synthesis, Processing, Characterization & Applications (AMSPCA)

7th - 12th December, 2015

[Application Form](#)

- 1. Name (Block letter):**
- 2. Designation & Pay-scale:**
- 3. Organization:**
- 4. Date of Birth:**
- 5. Address for communication:**

Pin Code:

Phone:

Fax:

E-mail:

6. Academic Qualification (Please tick)

(a) B.Tech.

(b) M.Tech.

(c) Ph.D.

7. Specialization:

8. Experience (in years)

(a) Teaching

(b) Industrial

(c) Research

9. Amount of TA requirement as per entitlement mentioned in the brochure (only for AICTE approved colleges)

Rs.:

Please register me for the course entitled "**Advanced Materials: Synthesis, Processing, Characterization and Applications (AMSPCA)**" to be held at VSSUT, Burla during 7th-12th December, 2015.

Place:

Date:

Signature of the applicant

SPONSORSHIP

For applicants from AICTE approved institutions

Prof./Dr./Mr./Ms. _____ is an employee of our institute and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course "Advanced Materials: Synthesis, Processing, Characterization & Applications" at VSSUT, Burla to be held from 7th-12th December, 2015, if selected.

Date: _____
Signature of sponsoring authority

Official Seal: _____
Designation

The duly completed application should be mailed to:

Dr. P.Mishra

QIP Short Term Course

Advanced Materials: Synthesis, Processing,
Characterization & Applications

Department of Mechanical Engineering

Veer Surendra Sai University of Technology, Burla

Sambalpur – 768018, Odisha, India

Tel.: 09338436223/0785585661, Fax:- 0663-2430204

Email: ppmishra_me@vssut.ac.in

gbehera_mme@vssut.ac.in

ELIGIBILITY

The course is open to all teachers of degree level technical/engineering colleges/institutions approved by AICTE. No course fee is charged for participants sponsored by AICTE approved institutions. However, a caution deposit of Rs.1000/- has to be sent by the provisionally selected participants, which will be returned when participant joins for the course.

The payment is to be made by DD drawn on any Nationalized Bank and in favour of **Coordinator, AMSPCA, payable at Burla.**

FINANCIAL ASSISTANCE

Limited number of participants from the AICTE recognized institutions will be eligible for III AC to and fro railway fare* (via shortest route from the place of work). Only the candidates attending the full course will be eligible for TA and DA.

BOARDING & LODGING

Boarding and lodging facilities shall be provided by the University for the candidates from AICTE approved institutions.

IMPORTANT DATES

The last date for receipt of duly filled applications is **31st October, 2015**. Intimation of selection of candidature will be communicated through e-mail by **7th November, 2015**. Final selection notification will be given after receipt of DD and willingness to attend the course.

Interested candidates may send an advance copy of the completed application by fax/email to avoid procedural/postal delay.

Veer Surendra Sai University of Technology, Burla, Odisha

Quality Improvement Programme (QIP) Short Term Course on

Advanced Materials: Synthesis, Processing, Characterization & Applications

7th- 12th December, 2015

Coordinators

Dr. P.Mishra

Mr. G.Behera



Organized by

Department of Mechanical Engineering

&

**Department of Metallurgy and Materials
Engineering**

Venue: Golden Jubilee Seminar Hall