



2021-2022



# Awareness of Trends in Technology (Circulars/Brochures)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

CORPORATE OFFICE  
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BHUBANESWAR | PARLAKHEMUNDI | RAYAGADA |  
BOLANGIR  
WWW.CUTM.AC.IN

This document contains the brochures of the events under Awareness of Trend in Technology conducted during 2022.

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*Anita Patra*



**Dr. Anita Patra, Registrar, CUTM**



## 1. Application of Video Processing

### Event Description:

Webinar on ‘Application of Video Processing’ was organized by Department of Computer Science, and Engineering, and IEEE, Bhubaneswar on 27<sup>th</sup> October 2021.



 Centurion  
UNIVERSITY

 IEEE  
Bhubaneswar Sub-Section

### WEBINAR ON

# Applications of Video Processing

Date: October 27, 2021, Wednesday  
Time: 3:00 PM (IST)


**Organised by :**  
Department of Computer Science and Engineering, Bhubaneswar Campus  
*In Collaboration with*  
IEEE Bhubaneswar Sub-Section



**Speaker**  
**Dr. Debi Prosad Dogra**  
Associate Professor  
School of Electrical Sciences  
IIT, Bhubaneswar

**Coordinator :**  
**Dr. Sujata Chakravarty**  
sujata.chakravarty@cutm.ac.in

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**Convener**



## 2. Training Programme on ANSYS EM

### Event Description:

Training Programme on ANSYS EM was organized by Department of Electronics and Communication Engineering on 16<sup>th</sup> November 2021.



The banner features logos for Centurion University, Institution's Innovation Council, and a 9th Edition award. The text is centered and reads: TRAINING PROGRAMME on "ANSYS EM", Date: - 16<sup>th</sup> NOVEMBER 2021 (10.00 AM-12.00 PM IST), Organized by: Dept. of Electronics & Communication Engineering. Below this, it lists the Resource Person as Mr. Kaushik Chavali, Application Engineer at CADFEM INDIA, and Coordinators as Dr. Harish Chandra Mohanta, Associate Professor at Dept. of ECE, SoET, CUTM, with Mob No.: 7008394417. The footer includes the university's name and tagline: centurion university of technology and management, Shaping Lives... Empowering Communities...

**TRAINING PROGRAMME**  
on  
**"ANSYS EM"**  
Date: - 16<sup>th</sup> NOVEMBER 2021  
(10.00 AM-12.00 PM IST)  
*Organized by :*  
**Dept. of Electronics & Communication Engineering**


**Resource Person**

  
**Mr. Kaushik Chavali**  
**Application Engineer**  
**CADFEM INDIA**

**Coordinators :**  
**Dr. Harish Chandra Mohanta**  
**Associate Professor**  
**Dept. of ECE, SoET, CUTM**  
**Mob No.: 7008394417**

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### 3. Recurrent Neural Network and its Applications: The Keras Way

#### Event Description:

Webinar on ‘Recurrent Neural Network and its Applications: The Keras Way’ was organized by Department of Computer Science and Engineering, Paralakhemundi and Center for Data Science and Machine Learning on 18<sup>th</sup> November 2021.



  
CENTURION  
UNIVERSITY

## WEBINAR ON

# Recurrent Neural Network and its Applications: The Keras Way

Date: Thursday, November 18, 2021  
Time: 7:30 PM (IST)

**Organised by :**  
Department of Computer Science and Engineering, Paralakhemundi Campus  
and Center for Data Science and Machine Learning



**Speaker**  
**Mr. Ashutosh Bajpai**  
Lead Data Scientist  
Wipro Technologies, New Delhi

**Coordinator :**  
Dr. Sujata Chakravarty  
(Professor and Center Head),  
Dr. Dillip Rout  
(Assistant Professor),  
Mr. Debendra Maharana  
(Assistant Professor and HoD)

**Zoom Meeting Link-**  
<https://us02web.zoom.us/j/88473154206?pwd=em8laE5sTHFIVld4MXk4dGdLbnhlZz09>

**Registration Link-**  
<https://tinyurl.com/p36hfz5j>

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#### 4. National Mathematics Day

##### Event Description:

Celebration of National Mathematics Day in form of Webinar was organized by Department of Mathematics, School of Applied Sciences on 22<sup>nd</sup> December 2021.

**DEPARTMENT OF MATHEMATICS**

Centurion UNIVERSITY

**NATIONAL MATHEMATICS DAY CELEBRATION**

Organized by: Department of Mathematics, School of Applied Sciences

22 December 2021 from 2:30 PM

**Speaker**  
Prof. Seshadev Padhi  
Prof. Dept. of Mathematics,  
BIT, Mesra, Ranchi

**Chief Guest**  
Prof. Dipankar Bhattacharyay  
Pro-VC, Research  
and Learning, CUTM

**Guest of Honour**  
Dr. Yashaswi Nayak  
Dean, School of  
Applied Sciences, CUTM

**Join Zoom Meeting Link:**  
<https://us02web.zoom.us/j/89389759549?pwd=bXJqTW1jWXhpNGF0a0hIS05ERU9ZUT09>  
Meeting ID: 893 8975 9549 Passcode: J2izAw

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## 5. Workshop on the Recent Trends in Software Industries

### Event Description:

The Training and Placement Cell in collaboration with the Computer Science and Engineering Department and EduTech & SkillsTech Center organized a workshop on the Recent Trends in Software Industries on 11<sup>th</sup> January 2022. Mr. Jeevan Jena, Project Manager in Wipro, was the invited Alumni Speaker.



**Workshop on Recent Trends in Software Industries**

**Centurion UNIVERSITY**

**Guest:**  
**Mr. Jeevan Jena**  
**Project Manager in Wipro**  
**CUTM Alumni (2004)**

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education Initiative)

**Zoom Meeting**

**Date- 11<sup>th</sup> January 2022**  
**Time: 10:30 AM – 12:30 PM**

**Organized By:**

**Dr. Dhawaleswar Rao CH      Mr. Kirtidev Mohapatra      Dr. Prajna Pani**

**Centre for EduTech & Skills Tech, Dept. of Computer Science & Engineering , Training & Placement Cell**

*Prajna Pani*

Convener



## 6. Webinar on Real World Applications of Business Analytics in Data Science & AI / ML from Industry Practitioners' Point of View

### Event Description:

This webinar on Real World Applications of Business Analytics in Data Science & AI / ML from Industry Practitioners' Point of View was organized by was organized by Department of Computer Science and Engineering, CUTM, Bhubaneswar Campus in Collaboration with TCS iON Higher Education Team on 20th January 2022 at 10.00 AM.



The banner features the Centurion University logo in the top left corner. The main title is centered in bold orange text. Below the title, the date, day, and time are listed. The organizing department is mentioned. A circular portrait of Dr. Sibani Mohapatra is shown on the left, with her name and credentials listed to the right. A box on the right lists the coordinators. The Zoom meeting link, ID, and passcode are provided at the bottom. The footer contains the university's name and tagline.

**Centurion UNIVERSITY**

**WEBINAR ON**

**Real World Applications of Business Analytics in Data Science & AI / ML from Industry Practitioners' Point of View**

**Date: 20th January, 2022 | Day: Thursday | Time: 10:00 AM (IST)**

**Organised by :** Department of Computer Science and Engineering, Bhubaneswar Campus in Collaboration TCS iON Higher Education Team.

**Speaker**

**Dr. Sibani Mohapatra**  
(Fellow, IIM Indore)  
Consulting Partner – Higher Education Team, TCS ION

**Coordinators :**

Dr. Sujata Chakravarty  
Professor and Head  
CUTM, BBSR

Mr. Kaustav Sengupta  
Regional Head  
East TCS iON Higher Education Team.

**Zoom meeting link:**

<https://us02web.zoom.us/j/85110890097?pwd=M24xeVNCUnZyaWt6bXg4cWdUaTNRJT09>

Meeting ID: 851 1089 0097  
Passcode: 803144

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## 7. Workshop on Composite Design and Fabrication

### Event Description:

The workshop on Composite Design and Fabrication was organized by Department of Chemistry, BBSR Campus, CUTM on 20<sup>th</sup> January, 2022.



The poster features a blue background with a grid of glowing dots. At the top left is the Centurion University logo. A green banner at the top center reads "Sustainable Development Goals Webinar Series". Below it, a grey arrow-shaped box contains the text "WORKSHOP ON Composite Design and Fabrication". To the right, an orange box displays "9 INDUSTRY, INNOVATION AND INFRASTRUCTURE" with a geometric logo. A central green box lists the speaker: "SPEAKER Dr Satya Prakash Pati Assistant Professor Department of Electrical and Electronic Engineering Kyushu University, Fukuoka Japan". To the right of this is a portrait of Dr. Satya Prakash Pati. On the left, a box labeled "TARGET 9-5" shows a network diagram and the text "ENHANCE RESEARCH AND UPGRADE INDUSTRIAL TECHNOLOGIES". At the bottom left, a grey box states "20<sup>th</sup> January 2022 11.30AM". At the bottom right, a yellow box says "Organized by: Department of Chemistry School of Applied Sciences Centurion University of Technology and Management, Odisha, India".

*Atia Arora*

**Convener**





## 8. Webinar on Introduction to 3D Game Design & Development Process.

### Event Description:

This webinar on the topic “Introduction to 3D Game Design & Development Process” was organized by the Centre for EduTech and SkillsTech, CUTM on 5<sup>th</sup> February 2022 at 10:00 A.M.

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**INSTITUTION'S INNOVATION COUNCIL**  
(OFFICE OF 100 INNOVATION)

**School of Media and Communication**  
in collaboration with  
**Centre for EduTech and SkillsTech**

**WEBINAR ON**  
**Introduction to**  
**3D Game Design &**  
**Development Process**

**Software used:**  
**Autodesk Maya &**  
**Substance Painter**

**Rajesh M Dharan**  
Sr. 3D Game Generalist at Fingent, Kochi

Join Zoom Meeting: <https://us02web.zoom.us/j/85242465662?pwd=N2wyOVVWZDB4VXJlY0RlME5EVW1lG0t09>  
Meeting ID: 852 4246 5662, Passcode: 392786

Scan the QR to Join the Meeting

**Date: 5<sup>th</sup> February 2022** | **Moderator: Dr. Prajna Pani**  
**Time: 10 AM to 11 AM** | **Organizer: Mr. Saban Kumar Maharana**

*Prajna Pani*

Convener





## 9. Webinar on Azure Fundamentals for Developers

### Event Description:

This webinar on the topic “AZURE FUNDAMENTALS FOR DEVELOPERS” was organized by the Centre for EduTech & SkillsTech in collaboration with the Training & Placement cell, CUTM on 12<sup>th</sup> February 2022 at 10.00 A.M.



The poster features a central illustration of a 3D digital environment with people interacting with various cloud computing icons like servers, laptops, and data storage. Logos for Centurion University, Institution's Innovation Council, and Microsoft are visible in the top corners.

**Centurion University of Technology and Management**  
Centre for EduTech & SkillsTech  
In collaboration with Training & Placement Cell  
Presents  
**Webinar on Azure Fundamentals for Developers!**

**Mr. Vivek Sridhar**  
Senior Cloud Advocate, Cloud + AI Engineering Team  
MICROSOFT

**Topics:**

- What's cloud computing?
- Different components of cloud computing - network, storage & compute
- Getting started with Azure Cloud - Azure Portal, CLI & Azure Cloud Shell.
- Build & Deploy a web app - Azure Container Instance, App Service, Container Apps & as Serverless.
- Build and deploy an app with GitHub Actions on Azure
- Introduction to Azure AI - Speech & Language services

**Organizer: Dr. Prajna Pani**      **12<sup>th</sup> February 2022**      **Contact: raj.trivedi@cutm.ac.in**  
**10 AM – 12 pm**

*Prajna Pani*

Convener



## 10. Workshop on Microtomy Technique II

### Event Description:

This workshop on the topic “Microtomy Technique II” was organized by the Dept. of Zoology, CUTM on 24<sup>TH</sup> Feb 2022 at 10:00 A.M.



The image shows a laboratory setting with a microtome and a tissue processor. Overlaid on the image is a red box with the text '4 QUALITY EDUCATION' and a logo of an open book and a pen. In the top right corner, there are logos for Centurion University and another university. The text 'WORKSHOP ON MICROTOMY TECHNIQUE II' is written across the center of the image.

**4 QUALITY EDUCATION**

**WORKSHOP ON  
MICROTOMY TECHNIQUE II**

**Organized by**  
**Department of Zoology**  
School of Applied Sciences  
Centurion University of Technology &  
Management, Odisha, India

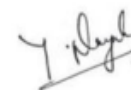
**For Queries Contact**  
**Dr Yashaswi Nayak**  
Associate Professor  
Head and Dean, School of Applied Sciences  
yashaswi.nayak@cutm.ac.in

**VENUE:** Zoology lab, Room# 419,  
Madhusudan Building

**DATE:** 24<sup>th</sup> Feb.2022

**TIME:** 10 AM

**Dr. Siba Prasad Parida**  
Associate professor  
Department of Zoology  
Centurion University of Technology  
and Management  
(Resource Person)



Convener



## 11. Webinar on Role of Digital Marketing for Aspiring Start-ups.

### Event Description:

This webinar on the topic “**Role of Digital Marketing for Aspiring Start-ups**” was organized by the Centre for Innovation and Entrepreneurship, CUTM on 3<sup>rd</sup> March 2022 at 3:30 P.M.

**ROLE OF DIGITAL MARKETING FOR ASPIRING START-UP**

Centurion University of Technology & Management  
Centre of Innovation & Entrepreneurship

03rd March 2022, 3.30pm  
Zoom Platform



Speaker: Mr. Jayendra Kumar Sahu  
Performance Marketing Manager at M2P Fintech

Coordinated By  
Dr. Madhusmita Choudhury

Logos: Centurion University of Technology & Management, Institution's Innovation Council, and a logo with the number 9.

*Madhusmita Choudhury*

Convener



## 12. International webinar on “Stem cell and gene editing in microgravity research and future scope.”

### Event Description:

This webinar on the topic “Stem cell and gene editing in microgravity research and future scope.” was organized by The Department of Botany, CUTM from 5<sup>th</sup> March, 2022.

**RECENT ADVANCES IN APPLIED SCIENCES WEBINAR SERIES**

**INTERNATIONAL WEBINAR ON:  
Stem cells & Gene editing in Microgravity Research and future scope**

ORGANIZED BY -  
Department of Botany, SoAS, CUTM

IN ASSOCIATION WITH -  
Center for Genetics & Genomics

**Mar 05 Saturday**  
03.00 pm IST

Join Zoom Meeting :  
<https://us02web.zoom.us/j/824377199117>  
pwd=MVpaTjZellzwaNl5mpuDRMGE3Zz09

Meeting ID: 824 377 19911  
Passcode: 391809

Click on the link below to register for the certificate :  
<https://www.cutm.ac.in/2022/03/05/>

For queries contact:  
Dr. Rūmini Mishra,  
Associate Professor and Head,  
Department of Botany, SoAS, CUTM  
E-mail: [ruminimishra@cutm.ac.in](mailto:ruminimishra@cutm.ac.in)

**Our Speaker:**

**Dr. Aviseka Acharya**  
Space Biologist, Science Entrepreneur & Mentor  
Institut für Neurophysiologie  
der Universität zu Köln,  
Köln, Germany

With more than 14 years of research experience (industrial and academic), Dr. Aviseka is one of the most conversant researchers in his field of molecular stem cell biology. Currently, he is investigating the effects of long & short-term  $\mu g$  &  $hg$  on induced pluripotent stem cells (iPSCs) for cardiovascular biology and model diseases “in a dish” with precise genome editing technologies advanced CRISPR/Cas9. His recent works are developing nanoparticle coated air purifier.

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*Rukmini Mishra* Convener





### 13. National Seminar on Climate Resilient Technologies for Sustainable Agriculture- Interventions and approaches.

#### Event Description:

The National Seminar on Climate Resilient Technologies for Sustainable Agriculture- Interventions and approaches was organized by Department of Genetics and Plant Breeding and Seed Science and Technology, M S Swaminathan School of Agriculture, Centurion University of Technology and Management during 26-27 march 2022

<p><b>ORGANIZING COMMITTEE</b></p> <p><b>CHIEF PATRON</b>  <b>Prof. Supriya Pattanayak</b>  <i>Honorable Vice-Chancellor              CUTM, Paralakhemundi</i></p> <p><b>PATRONS</b>  <b>Dr. Anita Palra</b>  <i>Registrar, CUTM, Paralakhemundi</i>  <b>Prof. M. Devender Reddy</b>  <i>Dean, Agriculture, MSSSOA, CUTM</i>  <b>Dr. S. P. Nanda</b>  <i>Dean, Admin, MSSSOA, CUTM</i>  <b>Dr. J. Anil Kumar</b>  <i>Associate Dean, MSSSOA, CUTM</i></p> <p><b>PATRONS ADVISORY COMMITTEE</b>  <b>Prof. A. Siv Sankar</b>  <b>Prof. Lata Kishore Rath</b>  <b>Prof. B. Sarinidha Rao</b>  <b>Dr. K. Krishnan Raju</b></p> <p><b>ORGANIZING SECRETARY</b>  <b>Dr. Niranjan Kumar Choudhary</b>  <b>Dr. Vinay Kumar</b></p> <p><b>ORGANIZING COMMITTEE MEMBERS</b>  <b>Dr. Sanghmitra Rout</b>  <b>Dr. Suman Parra</b>  <b>Dr. P. Susmita</b>  <b>Dr. Praveen Patted</b>  <b>Dr. Sudhartha S. Sharma</b>  <b>Mr. Durgadatta Meher</b>  <b>Dr. Rashmi K</b>  <b>Ms. Rajni Samantara</b>  <b>Dr. Ananda Chakraborty</b></p>	<p><b>Registration Form</b></p> <p>Full Name: _____              Designation: _____              Affiliation/Institute: _____              Full Address: _____              E-mail ID: _____              Mobile/Phone No: _____              Thematic area: _____              Title of the abstract/paper: _____</p> <p>Presentation Mode: Oral/Poster/Participation              Registration fee paid (Rs): _____              Reference No. of Payment: _____</p> <p>Signature of candidate: _____</p> <p><b>For any query, feel free to contact</b></p> <p><b>Organizing Secretary</b>              Email: <a href="mailto:crtsaia2022@gmail.com">crtsaia2022@gmail.com</a>              Mob. No. +91-8814038997/9036843674</p> <p><b>Registration Link:</b>  <a href="https://docs.google.com/forms/d/e/1FAIpQLSeafvNF67qV3wPg6svKNdWAT1uCdUuMB4tdhUrrN10I7jUw/viewform?vc=0&amp;c=0&amp;w=1&amp;fr=0">https://docs.google.com/forms/d/e/1FAIpQLSeafvNF67qV3wPg6svKNdWAT1uCdUuMB4tdhUrrN10I7jUw/viewform?vc=0&amp;c=0&amp;w=1&amp;fr=0</a></p>	 <p><b>National Seminar</b>  <b>ON</b>  <b>CLIMATE RESILIENT TECHNOLOGIES</b>  <b>FOR SUSTAINABLE</b>  <b>AGRICULTURE-INTERVENTIONS</b>  <b>AND APPROACHES (In Virtual Mode)</b></p>  <p><b>26<sup>th</sup> – 27<sup>th</sup> March, 2022</b></p> <p><i>Organized by:</i>  <b>Department of Genetics &amp; Plant Breeding</b>  <b>and Seed Science &amp; Technology</b>  <b>M. S. SWAMINATHAN SCHOOL OF AGRICULTURE</b>  <small>(ICAR Accredited Institution, CUTM,              Paralakhemundi, Odisha-761211)</small>  <a href="http://www.cutm.ac.in">www.cutm.ac.in</a></p>
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<p><b>ABOUT MSSSOA</b></p> <p>M. S. Swaminathan School of Agriculture (ICAR Accredited Institute) is a constituent of Centurion University of Technology and Management, Paralakhemundi, Gopali District, Odisha is a state private multi-sector allied university accredited with grade-A by NAAC and approved by UGC. This university is fully recognized as pioneer in "Self-Integrated Higher Education".</p> <p>Its unique model lays specific emphasis on creating sustainable livelihoods on a national scale in challenging geographies through education that results in employability and sparks entrepreneurship. Since its inception in 2006 and subsequent recognition as a university in 2019, Centurion university has created a unique environment that ensures a balanced learning and employability path for youth in resource poor geographies of Odisha and Andhra Pradesh.</p> <p><b>ABOUT THE SEMINAR</b></p> <p>Climate change has far serious implications concerning the food and nutritional security of nations like India where agriculture is the backbone of nation's economy and growing population to the biggest threat to security. It is anticipated that global food demand is expected to grow substantially with the population increase to over 9 billion people by 2050. To ensure the global as well as national food security, new interventions and approaches are required to achieve more sustainable development of agriculture and allied sectors. Application of local and system based approaches which include environmental, socio-economic status of the farmers, societies across all levels of organization in the field of the four interventions of climate resilient technologies have immense potential to sustain productivity in agriculture and allied sector and improve socio-economic status of the farmer.</p> <p>In this context, the present national seminar on "Climate Resilient Technologies for Sustainable Agriculture-Interventions and Approaches" (CRTSAIA) aims to provide a platform for academicians, researchers, and entrepreneurs for sharing their knowledge and experiences.</p>	<p><b>THEMATIC AREAS</b></p> <ol style="list-style-type: none"> <li>1. Agronomy</li> <li>2. Agricultural Meteorology and Remote Sensing</li> <li>3. Genetics and Plant Breeding</li> <li>4. Agricultural Biotechnology</li> <li>5. Agricultural Entomology</li> <li>6. Plant Pathology</li> <li>7. Horticulture</li> <li>8. Animal husbandry</li> <li>9. Fisheries and Aquaculture</li> <li>10. Post-harvest management</li> <li>11. Economics</li> <li>12. Agriculture Engineering</li> <li>13. Agri-Business and Marketing</li> <li>14. Agriculture Extension</li> <li>15. Environmental Sciences</li> </ol> <p><b>Lighting round for student and researchers</b></p> <p><b>Awards</b></p> <p>The best oral and poster presentation in each thematic area will be awarded in the seminar. All registered participants will get participation certificate.</p> <p><b>Submission of Abstract</b></p> <p>Abstract should not exceed 300 words in Times New Roman 12 font size on any one of the above said thematic areas. Abstract should be either submitted online registration form or sent to the organizing secretary via email at <a href="mailto:crtsaia2022@gmail.com">crtsaia2022@gmail.com</a>.</p> <p><b>Important Dates</b></p> <p>Last date for registration: 26/03/2022              Last date for abstract submission: 23/03/2022              Notification of acceptance: 24/03/2022</p>	 <p>Registration fees for Faculty-Scholarship-Entrepreneur: Rs. 300/-              AA/SAP/UP: Rs. 200/-              Students: Rs. 100/-</p> <p>Online payments against registration will be made to:</p> <p>Bank Account No. 1668131900004              IFSC Code: PUN00160219              Account Holders Name              Centurion University of Technology and Management              Bank Name: PUNJAB NATIONAL BANK              Branch Name: S. Ekapur</p> <p>Branch Address: S. Ekapur, Cutm Campus, Village: Akbar Nagar, P.O. S. Ekapur, Paralakhemundi, Dist: Ganapali, Odisha, Pin-761211</p> 
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*[Handwritten Signature]*

Convenor

## 14. Workshop on Antenna Design, RF Circuit Simulation, EMI/EMC Analysis using Ansys software

### Event Description:

This workshop on the topic “Antenna Design, RF Circuit Simulation, EMI/EMC Analysis using Ansys software” was organized by the Dept. of Electronics & Communication Engineering, CUTM on 13<sup>th</sup> April 2022 at 1:00 P.M.



**Workshop on Ansys Software Antenna Design, RF Circuit Simulation analysis**

Date: - 13<sup>th</sup> APRIL 2022  
(1.00 PM-4.00 PM IST )

**Organized by :**  
Dept. of Electronics & Communication Engineering

**Resource Person**



**Monisha Kamal Konda**  
Application Engineer  
CADFEM INDIA

**Coordinators :**  
Dr. Harish Chand Mohanta  
Associate Professor  
Dept. of ECE, ETCUTM  
Mob No.: 7008394417

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## 15. MATLAB Workshop on Mathematics and Machine Learning

### Event Description:

This MATLAB workshop on the topic “Mathematics and Machine Learning” was organized by the Dept. of Electronics & Communication Engineering, CUTM on 23<sup>rd</sup> April 2022 at 11:30 A.M.



**MATLAB WORKSHOP: MATHEMATICS AND MACHINE LEARN**

Date: - 23<sup>rd</sup> APRIL 2022  
(11.30 AM-2.00 PM IST)

*Organized by :*  
Dept. of Electronics & Communication Engineering

**Resource Person**



**Mr. Pickor Majumdar**  
Application Engineer  
ELMAX SYSTEMS & SOLUTIONS

**Coordinators :**  
Dr. Harish Chand Mohanta  
Associate Professor  
Dept. of ECSE, CUTM  
Mob No.: 7008394417

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## 16. Webinar on National Conference on Mechatronics, Computing and Signal Processing

### Event Description:

This webinar on the topic “National Conference on Mechatronics, Computing and Signal Processing” was organized by the Centre for Innovation and Entrepreneurship, CUTM from 29<sup>TH</sup> to 30<sup>TH</sup> April, 2022.

Committee Members	Registration Form	3rd National Conference On Mechatronics, Computing & Signal Processing 29 <sup>th</sup> -30 <sup>th</sup> APRIL 2022 (Online Conference through Zoom)
<b>CHIEF PATRON</b> Prof.(Dr) Supriya Pattanayak, VC, CUTM <b>PATRON</b> Prof. (Dr) Anita Patra, Registrar, CUTM <b>ADVISORY COMMITTEE</b> Prof.(Dr) A.M. Mohanty, Pro VC, CUTM Prof.Jagannath Padhi, Director, CUTM Prof.(Dr) Dipankar Bhattacharya, Pro VC (Research), CUTM Prof.(Dr.) Prasanta Kumar Mohanty, Dean Academics, CUTM <b>CONFERENCE ORGANIZING CHAIR</b> Prof.(Dr.) Harish Chandra Mohanta, HOD , ECE <b>TECHNICAL COMMITTEE</b> Dr. S. Biswas, IIT Guwahati Dr. S. Pandit, Calcutta University Dr. K. C. Ray, IIT Patna Dr. Sazia Hasan, BITS Dubai Dr. Pradyut K. Biswal, IIIT Bhubaneswar Dr. Subrat Kumar Mohanty, IIIT Bhubaneswar Dr. S. Ballarasingh, KIIT Bhubaneswar Dr. Ravi V, VIT Chennai Dr. R. Arun Sekar, GMRIT Rajam Dr. P. S. Subudhi, BIT Wardha Dr. Sushanta Mandal,Dean BGU,Bhubaneswar <b>CONVENER</b> Dr. Chinnmayee Dora Asst. Professor, Dept of ECE Dr. Chandra Sekhar Dash Asst. Professor, Dept of ECE <b>ORGANIZING COMMITTEE</b> Dr. Ashish Ranjan Dash Dr. Kamal Kumar Barik Dr.Sudhansu Kumar Samal Dr Mamata Garanayak Dr. Murali M. Mrs. Swarna Prabha Jena Mr. Subrat Kumar Pradhan Mr. Prabhat Kumar Patnaik Mrs. N Jeeva Ratnam Mrs. Prajan Paramita Debata Mr. Sandipan Pine Mr. S. N. Padhi Mr. Rajesh Mishra Mr. Nimay Chandra Giri Mrs. Bhabani Dash	<b>Registration Form</b> <b>3rd National Conference On Mechatronics, Computing &amp; Signal Processing 29<sup>th</sup>-30<sup>th</sup> APRIL 2022</b>  1. Name : ..... 2. Designation : ..... 3. Department: ..... 4. Research Area: ..... 5. Institution: ..... 6. Highest Qualification: ..... 7. Address for Communication: ..... 8. E-mail : ..... 9. Contact Number : ..... 10. Payment Transaction ID:.....  <b>Kindly fill the below link to register</b> <a href="https://docs.google.com/forms/d/1B4uQ3W6v4D2mK2H9R6-2L6T0V4a8PpQ8RCvWu/viewform">https://docs.google.com/forms/d/1B4uQ3W6v4D2mK2H9R6-2L6T0V4a8PpQ8RCvWu/viewform</a>  <b>The Registration Fee should be paid to the following account: CENTURION UNIVERSITY Account Number: 36700033488 IFSC: SBIN0002071 Branch: JATNI</b>	<b>3rd National Conference On Mechatronics, Computing &amp; Signal Processing 29<sup>th</sup>-30<sup>th</sup> APRIL 2022 (Online Conference through Zoom)</b>  <b>Centurion UNIVERSITY</b> <i>Creating Tomorrow</i> <b>Organised by:</b> Department of Electronics and Communication Engineering School of Engineering and Technology Bhubaneswar Campus CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT At : Ramchandrapur, Po : Jatni, Dist : Khurda, PIN : 752050 Odisha, India, Email: mcsp@cutm.ac.in <b>Website: <a href="https://sites.google.com/view/mcsp2022/home">https://sites.google.com/view/mcsp2022/home</a></b> 



### About the University

Centurion University is a State-enacted University which was established in the year 2010 by an act of the state legislature. Centurion University is accredited with NAAC "A" grade. School of Engineering & Technology (SoET Bhubaneswar Campus) is a constituent college of Centurion University of Technology & Management which is the First Multi-Sector State Private University in Odisha recognized by AICTE. SoET BBS draws on the experience of highly qualified faculties, emeritus professors and industry personnel. The institute has excellent infrastructure and state-of-the-art equipment. The institute has a global perspective coupled with a global academic interface. Sprawling across 40 acres, Bhubaneswar Campus is located within the Bhubaneswar Development Authority (BDA) area, established in the year 2008. The institute presently has an intake of 1000 students across five branches. Bhubaneswar campus has created a unique niche by providing opportunities for inclusive education of international standards.

### About Department of ECE

The Department of Electronics and Communication Engineering aims to train qualified and dynamic engineers in the rapidly evolving fields of Smart Devices, Mobile Emerging Technologies, Automation, Industrial IoT, and VLSI. The Department has advanced and current laboratory equipment as well as software/tools (ANSYS, CADENCE, MATLAB, MULTISIM, KEIL uVision, LABVIEW) for research and development in the areas of Antenna and Microwave Engineering, Signal Processing and Communication, VLSI and Embedded System. The ECE department works on real-time application projects in Smart Irrigation, Industrial IoT, Soil Moisture Prototyping, Insulin Pump Prototyping, and Chip Design. A Robotics Club is functional in the department since 2009. The department has its own departmental library, along with the main library, to facilitate the departmental students.

### Contact us:

**Dr. Harish Chandra Mohanta**  
Associate Professor, Dept of ECE  
School of Engineering & Technology, BBSR Campus, CUTM  
At : Ranchhandrapur, Po : Jatni, Bhubaneswar,  
Dist : Khurda, PIN : 752050  
Mob: +91 7008394417, Email: mcsp@cutm.ac.in

### Objective

The scope of National Conference is to provide a multidisciplinary platform for the exchange of ideas and knowledge among interested researchers, students, academician, and practitioners in the areas of Mechatronics, computing and Signal Processing. The conference will strengthen the relationships with other institutions and scientists, industry personnel and facilitate joint research programmers in these highly challenging areas.

### Call for Papers

Mechatronics is a multidisciplinary field of engineering that includes a combination of system engineering, mechanical engineering, electrical engineering, computer engineering and electronics and instrumentation engineering.

Topics of interest include but not limited to:

#### MECHATRONICS

Mechatronics, Mechanical System Design, Pneumatic & Hydraulic System, Industrial Robotics & Automation, Advanced Electric, Drives and Controls, Control Systems and Applications, Intelligent Controllers, Measurement and control, Power Electronic Controllers to Power Systems, Virtual Instrumentation, Sensors, Fluid and Dynamics, Vibration & Control, CAD/CAM, Programmable Logic Controller, Actuators, Material Management, Optimal Design, Analog and Digital Circuits, ADC/DAC, Electronics Instrumentations, Sensor technology, Solid Modeling, Manufacturing, Vibration & Noise Control.

#### COMPUTING

Artificial Intelligence and Machine Learning, Cloud, Cluster, Grid and Computing, Computational Intelligence, Computer Architecture and VLSI Computer Graphics, Simulation and Modeling, Cryptography, Computer Network, ADHOC, Web Design, Data Management & Mining Digital System and Logic Design, Internet Computing, Mobile Computing, Parallel and Distributed Algorithms, Pattern Recognition and Analysis Robotics and Machine Vision, Security.

#### SIGNAL PROCESSING

Adaptive Signal Processing, Audio / Speech Processing and Coding, Biomedical Image Processing, Digital Signal Processing, Image / Video Processing, Power Signal Processing, Signal Processing for Communications and Security, VLSI Signal Processing, Analog and Digital Communication, Antennas, RF and Microwave Communications, Cognitive Radio and Cognitive Networks, Information Theory and Coding, Internet Security and Signal Processing, Advanced Electric, Drives and Controls, Control Systems and Applications, Intelligent Controllers, Measurement and control, Power Electronic Controllers to Power Systems, Power Quality and Control, Power System Management and Control, SCADA / Embedded Systems, Electrical Devices, Ant Colony for Neural Network Optimization, Chaos Theory in Genetic Algorithms, Evolutionary Computing, Fuzzy System Optimization, Genetic Algorithm, Genetic Neural Systems, Hybrid optimization techniques, Neural Network Optimization, Neuro-Fuzzy-Genetic Approaches etc.

### Paper Submission

Authors are invited to submit papers to the upcoming conference. The manuscript/ paper can be submitted through email to [mcsp@cutm.ac.in](mailto:mcsp@cutm.ac.in) in the IEEE format only. Maximum of 4 authors can participate in any paper submission. A maximum of 8 pages are allowed for any paper/ manuscript. Manuscripts submitted to this conference will be deemed as they have not been published and are not under consideration for publication elsewhere.

After the conference, extended papers will be published in **Centurion Journal of Multidisciplinary Research** and a few selected papers to be published in a Scopus indexed journal.

### Important Dates

- Full Paper Submission: 31st March 2022
- Acceptance Notification: 11th April 2022
- Camera Ready Paper Submission: 18th April 2022
- Registration: 15th April 2022

Registration Fee in (Rs)	
Students & Research Scholars	1500
Academic/R & D	2000
Industry Participants	2500
Non-Author Participants	500

Convener



## 17. Workshop on Data Science using MATLAB.

### Event Description:

This workshop on the topic “Data Science using MATLAB” was organized by the Dept. of Electronics & Communication Engineering, CUTM on 6<sup>TH</sup> May 2022 at 11:30 A.M.



**Workshop on Data Science using MATLAB**

Date: - 6<sup>th</sup> MAY 2022  
(11.30 AM-2.00 PM IST )

**Organized by :**  
Dept. of Electronics & Communication Engineering

**Resource Person**



**Mr. Pickor Majumdar**  
Application Engineer  
ELMAX SYSTEMS & SOLUTIONS

**Coordinators :**  
Dr. Harish Chand Mohanta  
Associate Professor  
Dept. of EC&ETCUTM  
Mob No.: 7008394417

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## 18. 5th International Conference on Advances in Agriculture Technology and Allied Sciences (ICAATAS 2022)

### Event Description:

5th International Conference on Advances in Agriculture Technology and Allied Sciences (ICAATAS 2022)" organized by M. S. Swaminathan School of Agriculture (CUTM), Paralakhemundi, Odisha in collaboration with the Society of Agricultural Research and Social Development, New Delhi in Hybrid (Online/Offline) Mode from 4th to 5th June 2022



Dr. Ashirbanchan Mahapatra

Organizing Secretary (ICAATAS 2022)



Dr. Anita Patra, Registrar, CUTM



2020-2021



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# Awareness of Trends in Technology

**(Circulars/Brochures)**

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CAMPUS  
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BOLANGIR  
WWW.CUTM.AC.IN

This document contains the brochures of the events under Awareness of Trend in Technology conducted during 2020-21.

### List of Events

S. No.	Events	Participants
1	Webinar on Stability through VUCA Paradigms Renovation of Business and Economy	53
2	Webinar on EDUCATIONAL TECHNOLOGIES: Challenges and opportunities	61
3	Webinar on The Renewable Energy Landscape in India	89
4	Webinar on Sustainable Development and Clean Energy	80
5	Webinar on Plant Protection: Current and Future Perspectives	951

Anita Patra



**Dr. Anita Patra, Registrar, CUTM**



## 1. Webinar on Stability through VUCA Paradigms Renovation of Business and Economy

Event Description:

The webinar on Stability through VUCA Paradigms Renovation of Business and Economy was organized on 12<sup>th</sup> August 2020



 School of Management  
Centurion University of Technology and  
Management-Odisha  
Presents

Webinar on  
**Stability through  
VUCA Paradigms-  
Renovation of Business and Economy**

 VOLATILITY    UNCERTAINTY    COMPLEXITY    AMBIGUITY

**12th August 2020**  
4.00 PM - 6.30 PM

---

 **Moderator**  
Prof. Supriya Pattanayak  
Vice Chancellor, CUTM-Odisha

 **Panelist**  
Prof. Puteri Sofia Amiruddin  
Taylor's University,  
Malaysia

 **Panelist**  
Mr. Sukant Mishra  
Director (IT), AmerisourceBergen  
Columbus, U.S.A.

 **Panelist**  
Mr. Bhabani Sankar Jena  
Founder & CEO,  
DxMinds Technologies Inc. U.S.A.

 **Panelist**  
Prof.(Dr.) Arup Barman  
Professor, Assam University,  
Silchar, Assam



**Scan the QR Code  
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Drop mail for more Info @ [uknayak@cutm.ac.in](mailto:uknayak@cutm.ac.in)  
[www.cutm.ac.in](http://www.cutm.ac.in)



*Marjane*

Convenor

## 2. Webinar on EDUCATIONAL TECHNOLOGIES: Challenges and opportunities

Event Description:

The webinar on EDUCATIONAL TECHNOLOGIES: Challenges and opportunities was organized on 31<sup>st</sup> August 2020

**EDUCATIONAL TECHNOLOGY:  
Challenges and opportunities**

**31<sup>st</sup> August, 2020**  
**04:30 pm Onwards**  
Zoom Link: 864-7968-2859  
Password: 388866

Immersive learning:  
Challenges and Opportunities  
By Prof. Padma Rani

Educational Technology and  
Content Creation:  
Challenges and Opportunities.  
By Prof. Mrinal Chatterjee

We request your grand presence during the webinar.

Dr Umakanta Nayak  
Dean, School of Media and Communication  
Ms. Chinu Bohidar, Co-ordinator, SoMC  
Dr. Ambika Sankar Mishra, Associate Professor, SoMC,  
Convener

**SPEAKERS**

**PROF. SUPRIYA PATTANAYAK**  
Vice Chancellor,  
Centurion University Of  
Technology & Management

**ANITA PATRA**  
Registrar,  
Centurion University Of  
Technology & Management

**DR. PADMA RANI**  
Professor and Director,  
School of communication,  
Manipal Institute of Communication

**DR. MRINAL CHATTERJEE**  
Professor and Regional Director,  
Indian Institute of Mass Communication  
(IIMC)

Centurion  
UNIVERSITY

Convener

### 3. Webinar on The Renewable Energy Landscape in India

#### Event Description:

The webinar on The Renewable Energy Landscape in India was organized by R&A- Smart Infrastructure (Clean Technology) & Department of ECE, Centurion University of Technology and Management was organized on 21<sup>ST</sup> September 2020

**Centurion University of Technology and Management, Odisha**  
Center for Smart Infrastructure (Clean Technology)

**Webinar On The Renewable Energy Landscape in India**  
21<sup>st</sup> September 2020

**Eminent Speakers**

**Dr. Usha Bajpai**  
Retd. Professor, Dept. of Physics, University of Lucknow, U.P.

**Dr. Mahendra Kumar Mohanty**  
Professor, IITB, Bhubaneswar, Odisha

**Dr. Pradyumn Jena**  
Sr. Asst. Professor, Dept. of Chemistry, OAGT, Bhubaneswar, Odisha

----- No Registration Fee -----  
E Certificate will be provided to the participants after successful submission of Feedback Form  
Meeting URL: <https://meet.google.com/gbl-zore-tp>

**Patron**  
Prof. (Dr.) Supriya Pattnayak, Vice-Chancellor, CUTM

**Topics to be Covered**

- Renewable Energy Trends in India
- Solar PV Applications
- Wind Energy Applications
- Solar Thermal Systems
- Biofuel Production from Biomass
- Bioethanol Production from Lignocellulosic Biomass

**Coordinators**  
Sri. Nimay Chandra Giri, Asst. Professor, CREE, CUTM  
Sri. Debaraj Rana, Asst. Professor, ECE, CUTM  
Contact No: 6372211594/9861232210  
Mail ID: [nimay.giri@cutm.ac.in](mailto:nimay.giri@cutm.ac.in) / [debaraj.rana@cutm.ac.in](mailto:debaraj.rana@cutm.ac.in)

**Webinar on The Renewable Energy Landscape in India**  
(21<sup>st</sup> September 2020)

Organized by  
Center for Smart Infrastructure (Clean Technology)  
Centurion University of Technology and Management, Odisha

**Programme Schedule**

Date	Time	Speaker Name and Affiliation	Topic
21.09.2020	9:30AM	Inauguration	
21.09.2020	9:45 AM-11:15 AM	Dr. Usha Bajpai (Retired Professor, University of Lucknow)	• Renewable Energy Trends in India • Solar PV Applications • Wind Energy Applications
21.09.2020	11:15 AM-1:00 PM	Dr. Mahendra Kumar Mohanty (Professor, OUAT, Bhubaneswar)	• Solar Thermal System • Biofuel Production from Biomass
21.09.2020	1:00 PM	LUNCH BREAK	
21.09.2020	2:30 PM-4:00 PM	Dr. Pradeep Kumar Jena (Sr. Asst. Professor, OUAT, Bhubaneswar)	• Bioethanol Production from Lignocellulosic Biomass
21.09.2020	4:00 PM	Valedictory	

**Patron**  
Prof. (Dr.) Supriya Pattnayak, Vice-Chancellor, CUTM

**Advisory Committee Members**  
Dr. Anis Pasha, Registrar, CUTM  
Dr. A. M. Mohanty, ProVC, CUTM  
Prof. Jagannath Padhi, Director, CUTM  
Dr. Punzita K. Mohanty, Dean Academics, CUTM  
Mr. Vishal Kumar Singh, Center Coordinator

**Program Agenda**

**Inauguration**  
9:30 AM: Welcome Address by Dr. Supriya Pattnayak, VC, CUTM  
9:35 AM: Address to Participants by Prof. J. Padhi, Director, BBSR Campus  
9:40 AM: Briefing of Webinar and Details by Coordinator  
9:45: Presentation by Speakers

**Valedictory Session**  
4:10 PM: Feedback from Participants  
4:20 PM: Vote of Thanks by Coordinator

**Program Coordinators**  
Sri. Nimay Ch. Giri, Asst. Professor, CREE CUTM | [nimay.giri@cutm.ac.in](mailto:nimay.giri@cutm.ac.in) |  
Sri. Debaraj Rana, Asst. Professor, ECE, CUTM | [debaraj.rana@cutm.ac.in](mailto:debaraj.rana@cutm.ac.in) |

Nimay chandra Giri

Convener



#### 4. Webinar on Sustainable Development and Clean Energy

##### Event Description:

This webinar on Sustainable Development and Clean Energy was organized by Zenith School of Management and Centurion University of Technology and Management on 19<sup>th</sup> May 2021.



The poster features the logos of Centurion University and Zenith School of Management (ZSOM) at the top left. The main title is 'WEBINAR ON Sustainable Development and Clean Energy' in orange and black text, with the date and time 'Wednesday | 19th May 2021 | 5 PM - 7 PM' below it. Two speakers are featured with circular portraits: Mr. Gautam Pradhan, Regional Head of Odisha and Jharkhand at SELCO, and Mr. Dhruv Bhardwaj, Sr. GM of Sustainable Development at Schneider Electric. The poster also lists three patrons, two coordinators, and a Google Meet link that will be shared on May 19, 2021. At the bottom, it provides the websites www.zist.ac.in and www.cutm.ac.in.

**Zenith School of Management and  
Centurion University of Technology and Management  
Presents**

**WEBINAR ON**  
**Sustainable Development and Clean Energy**  
Wednesday | 19th May 2021 | 5 PM - 7 PM

**Eminent Speakers:**

**Mr. Gautam Pradhan**  
Regional Head, Odisha and  
Jharkhand, SELCO

**Mr. Dhruv Bhardwaj**  
Sr. GM, Sustainable Development,  
Asia Pacific- Energy Access- Schneider Electric

**Patrons :**

1. Dr. Supriya Pattanayak, VC-CUTM
2. Prof. Sashi Sekhar Garabadu, Chairman  
Zenith Group of Institutions
3. Prof. Anup Padhi, Director, ZSOM

**Coordinators:**

1. Dr. Shiv Sankar Das, Associate Professor,  
ZSOM, Mob. : +917440005999
2. Prof. Debashree Debadatta Behera  
Asst. Professor, Mechanical Dept., CUTM  
Mob. : +917205679856

**Google Meet Link:**  
Link will be shared  
on 19th May 2021

[www.zist.ac.in](http://www.zist.ac.in) | [www.cutm.ac.in](http://www.cutm.ac.in)

Debashree debadatta Behera

Convener





## 5. Webinar on Plant Protection: Current and Future Perspectives

### Event Description:

This webinar was conducted in the Series of Faculty Development Programme (FDP) on ‘Plant Protection: Current and Future Perspective’ was organized by Department of Entomology and Plant Pathology on 11<sup>th</sup>-14<sup>th</sup> June 2021



**Centurion University of Technology and Management**

Invites You For

**WEBINAR**

In the series of Faculty Development Programme

**“Plant Protection: Current and Future Perspective”**

11<sup>th</sup> - 14<sup>th</sup> June 2021 11:30 AM - 1:00 PM

#### Key Speakers



11<sup>th</sup> June 2021  
Dr. Amalendu Ghosh  
Senior Scientist (Entomology),  
IAR, Pusa, New Delhi, Delhi- 110012



12<sup>th</sup> June 2021  
Dr. Biswajit Patra  
Assistant Professor,  
Department of Agricultural Entomology,  
UBKV, West Bengal-736165



12<sup>th</sup> June 2021  
Dr. Abhijeet Ghatai  
Assistant Professor,  
Department of Plant Pathology,  
BAU, Sabour, Bihar- 8



13<sup>th</sup> June 2021  
Dr. Subrata Dutta  
Associate Professor,  
Department of Plant Pathology,  
BCKV West Bengal - 741252



14<sup>th</sup> June 2021  
Prof. Shantanu Jha  
Professor,  
Department of Agricultural Entomology,  
BCKV West Bengal - 741252

#### About the Webinar

This webinar will be organized by Department of Entomology and Department of Plant Pathology, M. S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Odisha, India. Speakers will cover all the aspects of Plant Protection in different areas. There is no registration fee for attending the webinar.

#### Patron



Prof. Supriya Pattanayak  
Vice Chancellor  
Centurion University of Technology and Management  
Odisha - 761211, India

#### Conveners



Dr. Nihal R  
Assistant Professor, Entomology  
M. S. Swaminathan School of Agriculture (ICAR Accredited)  
Centurion University of Technology and Management  
Odisha - 761211, India



Mr. Ritesh Kumar  
Assistant Professor, Plant Pathology  
M. S. Swaminathan School of Agriculture (ICAR Accredited)  
Centurion University of Technology and Management  
Odisha - 761211, India

#### Organizing Secretary



Dr. S. P. Nanda  
Dean, Admin  
M.S. Swaminathan School of Agriculture  
Centurion University of Technology and Management  
Odisha, India

#### Organizing committee

Dr. B. Praveen (Professor & Head)  
Department of Plant Pathology  
Dr. Riya Mukhopadhyay  
Ms. Abhinandita Sahoo  
Dr. Gagan Kumar  
Mr. Deepak Kandhar

Miss Lipsa Dash (HOD)  
Department of Entomology  
Mrs. V Ramalakshmi  
Mr. D  
Ms. Sudhanshu Bala N

For Registration: <https://forms.gle/zKXND86ENEVxu5tr7>

For Information, join any one of the WhatsApp group:

<https://chat.whatsapp.com/UiCgrP0Xnq5R0PVrYqib1>

<https://chat.whatsapp.com/ENczY8815tr1ApicAMRuwN>

<https://chat.whatsapp.com/GgeuFlug5OmBb2paWAuQuI>

<https://chat.whatsapp.com/G4PNcl18gyRK1sCAwRJuPd>

#### MODE OF DELIVERY

Live webinar through Zoom/ Google Meet

#### CERTIFICATE

E-Certificate will be issued to all full time

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Dr. Nihal R.  
(Convenor)  
Assistant Professor, Dept. of Entomology,  
MSSSoA, CUTM



Mr. Ritesh Kumar  
(Convenor)  
Assistant Professor, Dept. of Plant pathology,  
MSSSoA, CUTM



**Dr. Anita Patra, Registrar, CUTM**



2019-2020



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# Awareness of Trends in Technology

(Circulars/Brochures)

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This document contains the brochures of the events under Awareness of Trend in Technology conducted during 2019-20.

#### List of Events

S. No.	Events	Participants
1	Embedded system design	40
2	Mechatronics System Design	52
3	Mines Design using Surpac	53
4	VFX Editor Courses (Media and Film Arts)	53
5	Metal Transfer and Weld Metallurgy	60
6	Welding and Inspection	60
7	E-rickshaw Vehicle Designing & Manufacturing	73
8	Radiology Technician	68
9	Solar Lighting Technician	42
10	Smartphone Troubleshooting and Repair	40
11	Satellite & TV Communications	20
12	Microwave & RADAR Communications	59
13	SCADA & PLC based sequential control	60
14	Design Supervisor - (Wood Engineering)	40
15	Apparel Production & Marketing	40
16	Webinar on Launching New Product in 100 days from Concepts to Manufacturing	228
17	Webinar on Career prospects & opportunities post COVID 19	52
18	Webinar on FLO Learning series on Retail and Hospitality	30

Anita Patra



Dr. Anita Patra, Registrar, CUTM




## 1. EMBEDDED SYSTEM DESIGN

Year:2019

### Event Description:

This Embedded Systems Design webinar was organized on the year of 2019-20, By Centurion University of Technology and Management.



The image shows a hand interacting with a smart device (likely a smartwatch or small tablet) mounted on a green printed circuit board (PCB). The device's screen displays a digital clock at 12:00, the date Tuesday, April 20, 2020, and several icons for Security, Video, Storage, and Lights. A yellow ribbon graphic curves across the top right of the image. In the top right corner, the Centurion University logo is visible, featuring a circular emblem with a globe and the text "Centurion UNIVERSITY" and "Empowering Connections".

**Embedded Systems Design**

Year : 2019-20

**Centurion University of Technology and Management**



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Develop skilled workforce with the knowledge on latest technologies to meet the need of Embedded Industry.
- ‡ Make the student industry -ready with hands -on experience in the various Real -Time Embedded Systems.

### Learning Outcomes:

- ‡ Distinguish between the general computing system and Embedded System.
- ‡ Identify and develop various product -based Embedded Systems.
- ‡ Able to configure and build a customized Linux Kernel.
- ‡ Ability to set up and use Cross Development platform.
- ‡ Execute on the knowledge gained on the Embedded Systems to become an entrepreneur.

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to Embedded System</li> <li>• Embedded System Development Life Cycle</li> <li>• Introduction to ARM</li> <li>• AMBA &amp; AHB</li> <li>• Features of ARM7, ARM9, ARM 11, ARM Cortex</li> <li>• Datasheet analysis</li> <li>• GPIO programming – LED, Seven Segment Display, LCD, Matrix keypad, Actuators ( Relay, Motors, and valves)</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Real-Time OS</li> <li>• Types of RTOS</li> <li>• GPOS vs RTOS</li> <li>• Scheduling Algorithms &amp; its API</li> <li>• Inter Task Communication &amp; its API</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Embedded Linux Overview</li> <li>• Linux File System</li> <li>• Types of Kernel</li> <li>• Shell Commands</li> <li>• Shell Scripting</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*H. K. Kulkarni*  
 Convenor



## 2. Mechatronics System Design

Year:2019-20

### Event Description:

This Mechatronics System Design webinar was organized on the year of 2019-20, By Centurion University of Technology and Management.



**Mechatronics  
System Design**

Centurion  
UNIVERSITY  
*Shaping Lives...  
Empowering Communities*



Tools

Computers

Cars

Consumer Electronics

MEMS

Stealth Bomber

High Speed Trains

Friday, April 1, 2016

26

**Year : 2019**

**Centurion University of Technology and  
Management**



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

**Course Objectives:**

- 1 Understand key elements of Mechatronics system.
- 1 Understand principles of sensors, its characteristics, interfacing with controller.
- 1 Understand and develop the concept of PLC system and its ladder programming, and significance of PLC systems in industrial application.

**Learning Outcomes:**

- 1 Identification of key elements of Mechatronics system and its representation in terms of block diagram or circuitry.
- 1 Understanding the concept of signal processing and use of interfacing systems such as Pneumatics system and PLC control .

- 1 Interfacing of Sensors, Actuators using appropriate controller.
- 1 Development of PLC ladder programming and implementation of real life system.

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Identification and familiarization of the following components: resistors, inductors, capacitors, diodes, transistors, LED's, transformer, function generator, multimeter, power supply.</li> <li>• Practice - To instruct students about application of different electrical &amp; electronics components and measuring devices. Practice to be done by students on using of different electrical and electronics components and measuring devices like volt meter, ammeter and multimeter.</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Pneumatics and Electro-pneumatics.</li> <li>• Practice: To discuss about the fundamentals of Pneumatics&amp; Electro-Pneumatics trainer kit</li> <li>• Practice: Understanding pneumatics, E-Pneumatics symbols and circuit drawings.</li> <li>• Practice: Perform a set of Experiments using the trainer kit and components with the help of circuit diagram.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• PLC and Interfacing of Input/output</li> <li>• Practice - Demonstration of basic PLC, contacts, coils, timers and counters; motor drivers, Variable Frequency Drives and solenoid valves.</li> <li>• Practice - Demonstration of PLC programs using contacts, coils ,timers and counters.</li> <li>• Practice - Designing different logics using PLC programming.</li> <li>• Practice - Interfacing different input and output components with PLC, like different sensors, motors and actuators.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*H. S. S.*

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### 3.Mines Design using Surpac

Year:2019-20

#### Event Description:

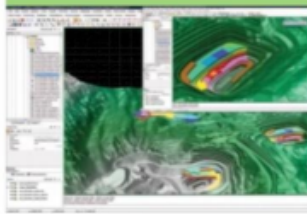
This Mines Design Using Surpass webinar was organized on the year of 2019-20. Which Deal with geological database and its Structure.

**Mines Design  
using Surpac**

Centurion  
UNIVERSITY  
Shaping Lives...  
Empowering Communities

Year : 2019

Centurion University of Technology and  
Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- † To make aware of basic components in mine design software.
- † Expose to the validation of Geological modeling.
- † Familiarization with String, DTM, Geological database.
- † Geological Drill hole database, Block modeling, Road and Ramp design

### Learning Outcomes:

- † Deal with a geological database and structure.
- † Validation of Solid modeling and application.
- † Concepts of Block modeling and design.
- † Design of Pit, Ramp, and Road design

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Overview, Workflow, Geological database concepts, setting up of work directory, Setting Work directory, the concept of String, point, and segments.</li> <li>• DTM surfaces</li> <li>• Concepts of DTM, Displaying the DTM, Triangles in DTM, Application of DTM's – sections, Contouring (by DTM's, and by Strings), Contouring by triangulation method.</li> </ul>	10 hours
Module-2	<ul style="list-style-type: none"> <li>• Geological Database</li> <li>• Create user define fields and tables, Concepts and structure of the geological database, Creating geological database, Importing data into a geological database (from CSV files), Displaying drill holes from the database with collar, assay, and geology data.</li> </ul>	10 hours
Module-3	<ul style="list-style-type: none"> <li>• Block Modelling</li> <li>• Concepts of block modelling, Concepts of constraints and attributes • Partial percentage and assign value function in the block model, Displaying block models and colour-coding, Estimation of grades, Creating a report from block models.</li> <li>• Pit and miscellaneous Design</li> <li>• Pit design concept, Basic input parameters for pit design, Creating a pit design with different tools, Road and Ramp design.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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#### 4.VFX Editor Courses (Media and Film Arts)

Year:2019-20

#### Event Description:

This VFX Editor Courses (Media and Film Arts) webinar was organized on the year of 2019-20 By Centurion University of Technology and Management

**VFX Editor Courses  
(Media and Film Arts)**

**Centurion  
UNIVERSITY**  
Shaping Lives...  
Empowering Communities

**Centurion University of Technology and  
Management**

**Year : 2019**



Prerequisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ⌋ To develop an understanding of the filmmaking process and film studies along with the evolution of 'Film' as a performative art.
- ⌋ To know the technological development in filmmaking and film studies.
- ⌋ To impart technique and skill of film appreciation, film review, and film analysis to learners.
- ⌋ To engage learners in screening of world panorama and Indian panorama and further to guide them for research work by project mode
- ⌋ To introduce learners to mobile phone filmmaking and digital filmmaking.

### Learning Outcomes:

- ⌋ To develop skills in understanding aspects of cinema from the view point of film-making and film studies.
- ⌋ Learners will be able to appreciate, analyze and review a film for academic research, media and communication industry and entertainment industry.

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>• Origin and development of cinema, film language and theories: aesthetic theories, soviet formalist theories and ideological theories and society, film movement, new wave films.</li> <li>• Film and technology: short history of technological development of cinema: story and characterization; script writing and story board; production design; finance; film shooting; crew and cast; sound recording, set design and set lighting, camera movements: pan, roll, tilt, tracking, zoom, deep focus, soft focus, rack focus; post-production editing: sound track, montage, parallel and parallel cutting, fade, dissolve, iris, wipe; introduction to VFX, SFX, Animation, Chroma; introduction to mobile camera film production, introduction to digital filmmaking</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• Film crew: director, producer, actor, writer, music director, choreographer, editor, cinematographer, art director, sound engineer and sound recordist, costume designer, film star, selected film personalities, their works and achievements</li> <li>• Film Appreciation: How to read cinema.</li> <li>• Film Review: Review of selected films in Indian Panorama and World Panorama.</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• Odia Cinema: Origin and growth, Cinema and Odia Culture, Odia New Wave or Parallel Cinema, Review of selected Odia films.</li> <li>• Case Studies: Screening of Indian Panorama and World Panorama, Project Work on Selected Cinema.</li> <li>• Film Pitching: International Film Festival of India (IFFI), National and International Film Festivals in India and Abroad.</li> <li>• Film Entrepreneurship: Introduction to Film Industry in India, Distribution and Marketing of the Cinema.</li> </ul>	10 hours
<b>TOTAL 30 hours</b>		

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## **5.Metal Transfer and Weld Metallurgy**

**Year:2019-20**

### **Event Description:**

This Apparel Production & Marketing webinar was organized on the year of 2019-20. It gave brief idea to students about uses of alloy for a given commercial application.



**Metal Transfer and  
Weld Metallurgy**



**Year : 2019 -2020**

**Centurion University of Technology and  
Management**



Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- ✧ To understand and use of alloys for a given commercial application.
- ✧ To use the physical principles of arc, plasma, laser, resistance spot, electron beam and solid state welding processes

### Learning Outcomes:

- ↓ Students will be able to learn and use of alloys for a given commercial application
- ↓ Students will be able to construct of virtually all components of the assemblies

Module	Contents	Duration
Module - 1	Introduction to welding metallurgy, phase diagrams	6 hrs
Module - 2	Changing map and geo -information production environments	6 hrs
Module - 3	Metal strengthening approaches	6 hrs
Module - 4	Heat treatment processes for weldments	6 hrs
Module - 5	Analysis of heat flow and temperature distribution in welding	6 hrs
<b>TOTAL</b>		<b>30 hours</b>

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## 6.Welding and Inspection

Year:2019-20

### Event Description:

This Welding and Inspection webinar was organized on the year of 2019-20 By Centurion University of Technology and Management





Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- 1 To identify various weld imperfections (defects)
- 1 To Understand the relevant welding technology related to visual inspection
- 1 To Understand the need for documentationwelding

### Learning Outcomes:

- 1 Students will be able to carry out inspection of parent materials and consumables
- 1 Students will be able to carry out visual inspection of welds, report on them and assess their compliance with specified acceptance criteria

Module	Contents	Duration
Module1	Weld imperfections (defects)	6 hrs.
Module2	Relevant welding technology related to visual inspection	6 hrs.
Module3	Documentation in welding	6 hrs.
Module4	Inspection of parent materials and consumables	6 hrs.
Module5	Assess their compliance with specified acceptance criteria	6 hrs.
<b>TOTAL</b>		<b>30 hours</b>

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## 7. E-rickshaw Vehicle Designing & Manufacturing

Year:2019-20

### Event Description:

This E-rickshaw Vehicle Designing & Manufacturing webinar was organized on the year of 2019-20. It gives idea about designing and assembling of E-Rickshaw using 3D-Experience (Dassault)

**E-rickshaw Vehicle  
Designing &  
Manufacturing**

Smart-Mobility Center

Year : 2019-2020

Centurion University of Technology and  
Management



Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- ‡ To Design & development of Electric Rickshaw
- ‡ To Use of digital multi -disciplinary technology

### Learning Outcomes:

- ‡ Students will learn how to design an Erickshaw
- ‡ Students will be able to Use of digital multi -disciplinary technology
- ‡ Students will be able to use of 3D Experience Platform of Dassault Systemes

Module	Contents	Duration
Module - 1	Design & development of Electric Rickshaw for 800kg passenger carrier (4+1 seater)	6 hrs.
Module - 2	Low affordable mobility	6 hrs.
Module - 3	Use of digital multi -disciplinary technology	6 hrs.
Module - 4	Commercialize with start-ups, Intellectual Property and/or generate employability	6 hrs.
Module - 5	Use of 3D Experience Platform of Dassault Systems	6 hrs.
	<b>TOTAL</b>	<b>30 hours</b>

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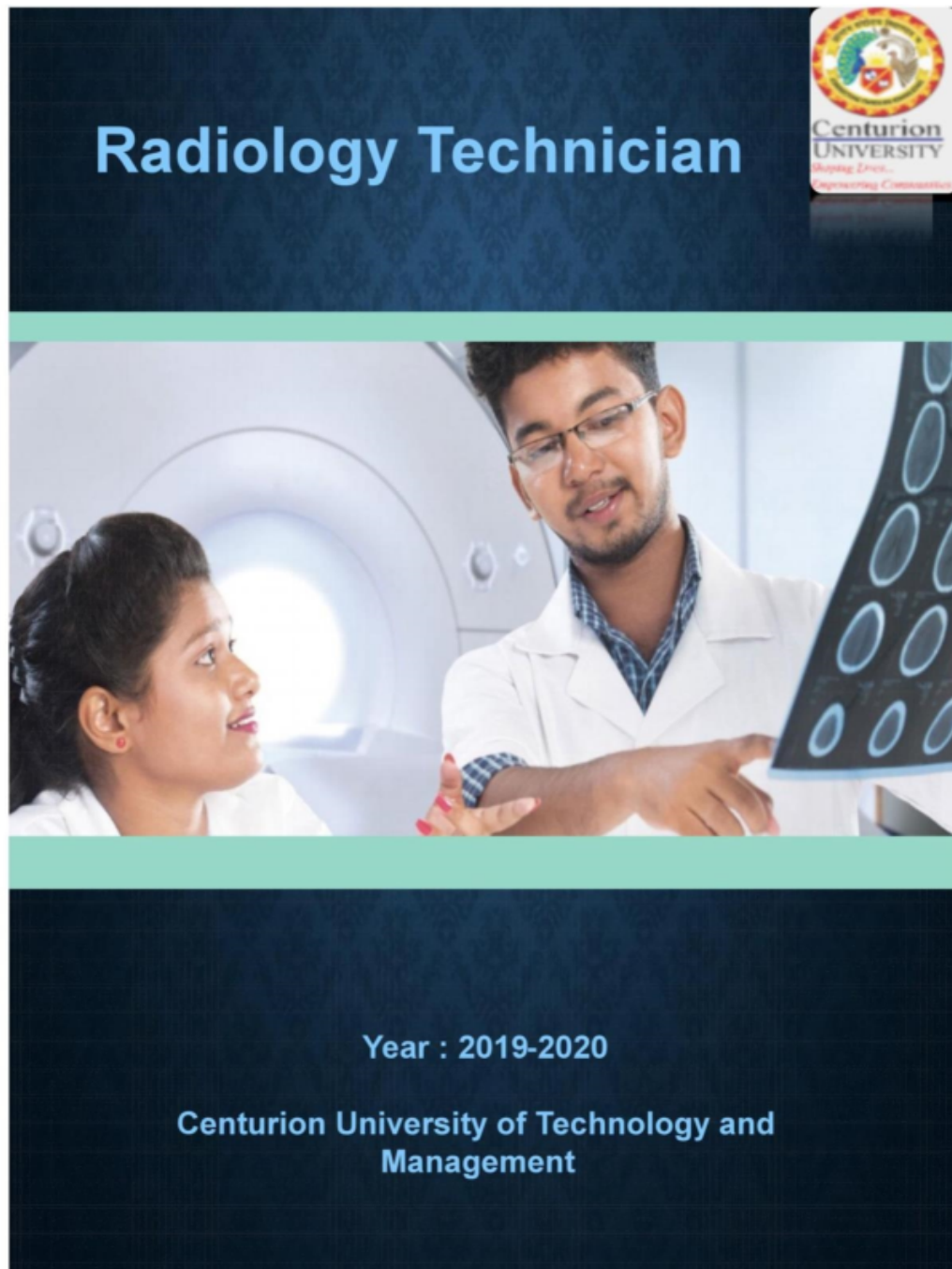


## 8.Radiology Technician

Year:2019-20

### Event Description:

This Radiology Technician webinar was organized on the year of 2019-20. It describes about Advanced Radiology Equipment and Uses.



The image shows a presentation slide for a Radiology Technician webinar. The slide has a dark blue background with a light blue horizontal band across the middle. In the top right corner, there is a circular logo for Centurion University with the text "Centurion UNIVERSITY" and "Helping Lives... Empowering Communities". The main title "Radiology Technician" is written in large, light blue font on the dark blue background. Below the title, a photograph shows a male radiologist in a white lab coat and glasses pointing at a large X-ray film held by a female radiology technician. The X-ray film shows several circular patterns. At the bottom of the slide, the text "Year : 2019-2020" and "Centurion University of Technology and Management" is displayed in light blue font.

**Radiology Technician**

Centurion  
UNIVERSITY  
Helping Lives...  
Empowering Communities

Year : 2019-2020

Centurion University of Technology and  
Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

The course aims to equip participants with practical knowledge of:

- ‡ To use advanced radiographic equipment such as CT Scan (Computed Tomography), MRI (Magnetic Resonance Imaging) along with basic X -Ray equipment for creating images of a patient's internal anatomy
- ‡ Able to comply with safety regulations involved in the use of radiography equipment while on the job.

### Learning Outcomes:

- ‡ Advanced radiographic equipment such as CT Scan (Computed Tomography).
- ‡ MRI (Magnetic Resonance Imaging) along with basic X-Ray equipment for creating images of a patient's internal anatomy

Module	Contents	Duration
Module -1	CT Scan (Computed Tomography), MRI (Magnetic Resonance Imaging) along with basic X-Ray equipment for creating images of a patient's internal anatomy	6 hrs.
Module -2	safety regulations involved in the use of radiography equipment while on the job	6 hrs.
Module -3	MRI (Magnetic Resonance Imaging)	6 hrs.
Module -4	Use of radiography equipment while on the job	6 hrs.
Module -5	Radiology Technician training provided by VIVO	6 hrs.
	<b>TOTAL</b>	<b>30 hours</b>

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## 9. Solar Lighting Technician

Year:2019-20

### Event Description:

This Solar Lighting Technician webinar was organized on the year of 2019-20 By Centurion University of Technology and Management.

# Solar Lighting Technician



Year : 2019-20

Centurion University of Technology and Management



### Course Objectives:

- ‡ Familiarization to the principles, materials, and tools required for solar lighting system.
- ‡ Develop an end-to-end technical understanding to execute solar lighting system.

### Learning Outcomes:

- ‡ Assembly of different types of solar lamps
- ‡ Repair of solar lamps
- ‡ Assembly and repair of solar home lighting system
- ‡ Assembly and Repair of solar street lights

Pre-requisites: Nil  
 Course Type : Audit  
 (Workshop)  
 Duration : 30 Hours

Module	Contents	Duration
Module-1	<b>Work Organization and Management</b> <ul style="list-style-type: none"> <li>• Overview and applications in multiple sectors, Work technical terminology and symbols, theory and applications of mathematics, physics, and geometry, Standards currently used and recognized by industry, Current internationally recognized standards, Health and safety legislation and best practice including specific safety.</li> <li>• Practice- Demonstration of Solar powered home/street lights projects</li> </ul>	10 hours
Module-2	<b>Practice: Preparation of Solar home/street lights system layout</b> <ul style="list-style-type: none"> <li>• Practice- Identify and specify the different Electrical components used in Solar Home/Street lights system and carry out it's operation</li> <li>• Practice- Perform simple calculation of power, energy, radiation etc.</li> <li>• Practice- Measurement of solar radiation in different geographical area</li> </ul>	10 hours
Module-3	<b>Practice- Identify the different components used in a Solar PV lighting system</b> <ul style="list-style-type: none"> <li>• Practice- Carry out operation of the Solar PV lighting system components</li> <li>• Practice- Identify the different components used in a Solar PV street lights system</li> <li>• Practice- Carry out operation of the Solar PV Street lights system components</li> <li>• Practice- Design and validation of solar home lighting and street lights systems</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*D. Shrin.*

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## 10. Smart Phone Trouble shooting and Repair

Year:2019-20

### Event Description:

This Smart Photo Trouble Shooting and Repair webinar was organized on the year of 2019-20 By Centurion University of Technology and Management



# Smart Phone Trouble shooting and Repair



Year : 2019

Centurion University of Technology and  
Management



Pre-requisites: Nil  
Course Type : Audit (Wo  
Duration : 30 Hours

### Course Objectives:

- ‡ Develop the skills required to design a next generation wireless networks
- ‡ To involve the students in the theory and practice of wireless communications

### Learning Outcomes:

- ‡ Various Communications available and its challenges in modern era

Module	Contents	Duration
Module1	<ul style="list-style-type: none"><li>• How to disassemble &amp; assemble different types of cell phones</li><li>• Identifying different parts of GSM and CDMA handsets</li></ul>	10 hours
Module2	<ul style="list-style-type: none"><li>• Tools used for mobile phone repairing</li><li>• How to use different tools used for mobile repairing</li><li>• Work of different parts &amp; ICs</li></ul>	10 hours
Module3	<ul style="list-style-type: none"><li>• Jumpering techniques</li><li>• Techniques used to repair (troubleshooting) different faults</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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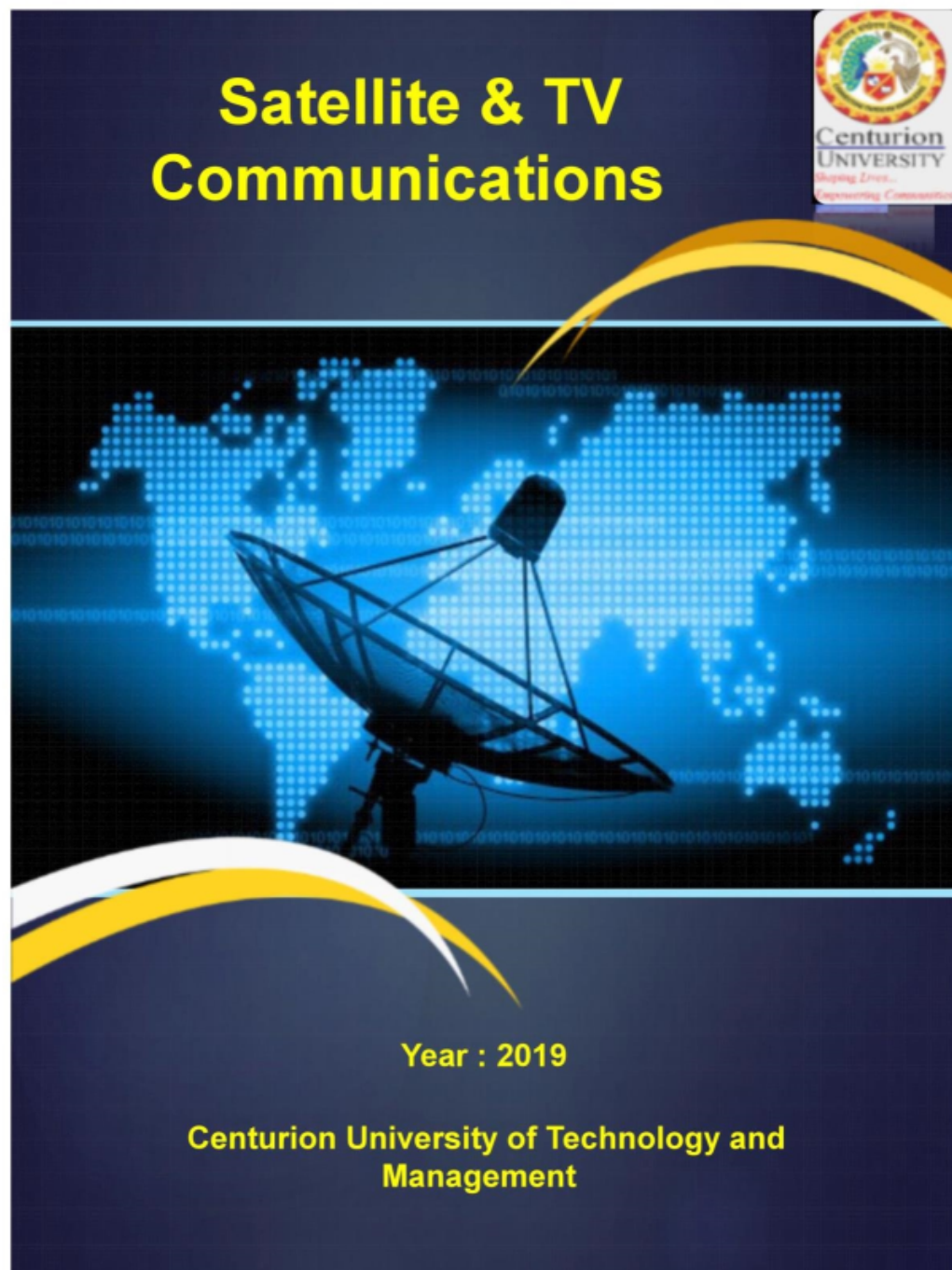


## **11. Satellite & TV Communications**

**Year:2019-20**

### **Event Description:**

This Satellite & TV Communication webinar was organized on the year of 2019-20 By Centurion University of Technology and Management





Pre-requisites: Nil  
Course Type : Audit  
(Workshop)  
Duration : 30 Hours

## Course Objectives:

- ‡ Develop the skills required to design a next generation wireless networks
- ‡ To involve the students in the theory and practice of wireless communications

## Learning Outcomes:

- ‡ Various Communications available and its challenges in modern era

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"><li>• Configuration of a satellite communications system</li><li>• Types of orbit</li><li>• Radio regulations</li><li>• Keplerian orbits</li><li>• Useful orbits for satellite communication</li><li>• Perturbations of orbits</li><li>• Digital video broadcasting via satellite (DVB -S)</li></ul>	10 hours
Module -2	<ul style="list-style-type: none"><li>• Second generation DVB -S</li><li>• Digital transmission of telephony</li><li>• Digital broadcasting of television</li><li>• Configuration of a link</li><li>• Uplink received power</li><li>• Downlink received power</li><li>• Additional losses</li><li>• Noise power spectral density at the receiver input</li></ul>	10 hours
Module -3	<ul style="list-style-type: none"><li>• Individual link performance</li><li>• Influence of the atmosphere</li><li>• Mitigation of atmospheric impairments</li><li>• Overall link performance with transparent satellite</li><li>• Overall link performance with regenerative satellite</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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## 12.Microwave & RADAR Communications

Year:2019-20

### Event Description:

This Microwave & RADAR Communication webinar was organized on the year of 2019-20. By Centurion University of Technology and Management





**Course Objectives:**

- ↓ Develop the skills required to design a next generation wireless networks
- ↓ To involve the students in the theory and practice of wireless communications

**Learning Outcomes :**

- ↓ Various Communications available and its challenges in modern era

Pre-requisites: Nil  
 Course Type : Audit  
 (Workshop)  
 Duration : 30 Hours

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Introduction to Microwaves: Microwave frequencies</li> <li>• Scattering matrix formulation</li> <li>• Passive microwave devices</li> <li>• Active Microwave Devices</li> <li>• Study of field pattern of various modes inside a rectangular waveguide</li> <li>• Microwave Measurements</li> <li>• Transit time limitations in Microwave Bipolar Transistors</li> <li>• Power frequency limitations Microwave Field Effect Transistors</li> </ul>	10 hours
Module-2	<ul style="list-style-type: none"> <li>• Gunn Effect</li> <li>• IMPATT diodes</li> <li>• TRAPATT diodes</li> <li>• Microwave vacuum tube based devices</li> <li>• Limitations of conventional tubes at UHF</li> <li>• Microwave Klystron</li> <li>• Reflex klystron,</li> <li>• Traveling wave tube</li> <li>• Magnetron</li> <li>• Introduction to Smith chart and its application for the unknown impedance measurement</li> </ul>	10 hours
Module-3	<ul style="list-style-type: none"> <li>• Scattering Matrix Parameters</li> <li>• Introduction to radar and RADAR Parameters</li> <li>• MTI RADAR</li> <li>• FMCW RADAR</li> <li>• Tracking RADAR</li> <li>• Monopulse RADAR</li> <li>• RADAR Receiver</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*H. Anwar*  
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### 13. SCADA & PLC based sequential control

Year:2019-20

#### Event Description:

This SCADA & PLC based sequential control webinar was organized on the year of 2019-20 By Centurion University of Technology and Management





### Course Objectives:

- ‡ To upgrade knowledge levels needed for modern industries
- ‡ Process & sequential control logic of industry.
- ‡ Project based training

### Learning Outcomes:

- ‡ Gain knowledge on advanced industrial automation
- ‡ Understand different types of Devices to which PLC input and output modules are connected
- ‡ Provide the knowledge about understand various types of mobile applications.
- ‡ Industry based project & advanced learning.

Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

Module	Contents	Duration
Module -1	<b>SCADA &amp; PLC BASED SEQUENTIAL CONTROL</b> <ul style="list-style-type: none"> <li>• Script</li> <li>• Networking</li> <li>• Device connectivity.</li> <li>• Practice :               <ul style="list-style-type: none"> <li>• Script</li> <li>• Networking</li> <li>• Device connectivity</li> </ul> </li> </ul>	10 hours
Module -2	<b>SCADA BASED ADVANCED FEATURES</b> <ul style="list-style-type: none"> <li>• Alarms</li> <li>• Trends, Data base connectivity &amp; Report generation</li> <li>• Recipe management</li> <li>• Security.</li> <li>• Practice :               <ul style="list-style-type: none"> <li>• - Data fetching and representing on graph and excel</li> <li>• - Advanced controlling of industry by using SCADA</li> </ul> </li> </ul>	10 hours
Module -3	<b>ADVANCED PROGRAMMING &amp; CONTROL BLOCKS OF PLC</b> <ul style="list-style-type: none"> <li>• CPT, ADD, SUB, MUL, DIV, SQR, NEG, TOD, FRD</li> <li>• MOV, MVM, AND, OR, XOR, NOT, CLR.</li> <li>• BSL, BSR, SQC, SQL, SQO, FFL, FFU, LFL, LFU</li> <li>• JMP, LBL, JSR, MCR</li> <li>• Connecting PLC software with SCADA software</li> <li>• Practice               <ul style="list-style-type: none"> <li>• - Comparison of industry based analog signals.</li> <li>• - Detecting different product output of an industry</li> <li>• - Sequential control of an industry by using advanced blocks.</li> <li>• - Emergency control system of a industry</li> </ul> </li> <li>• Connecting PLC software with SCADA software</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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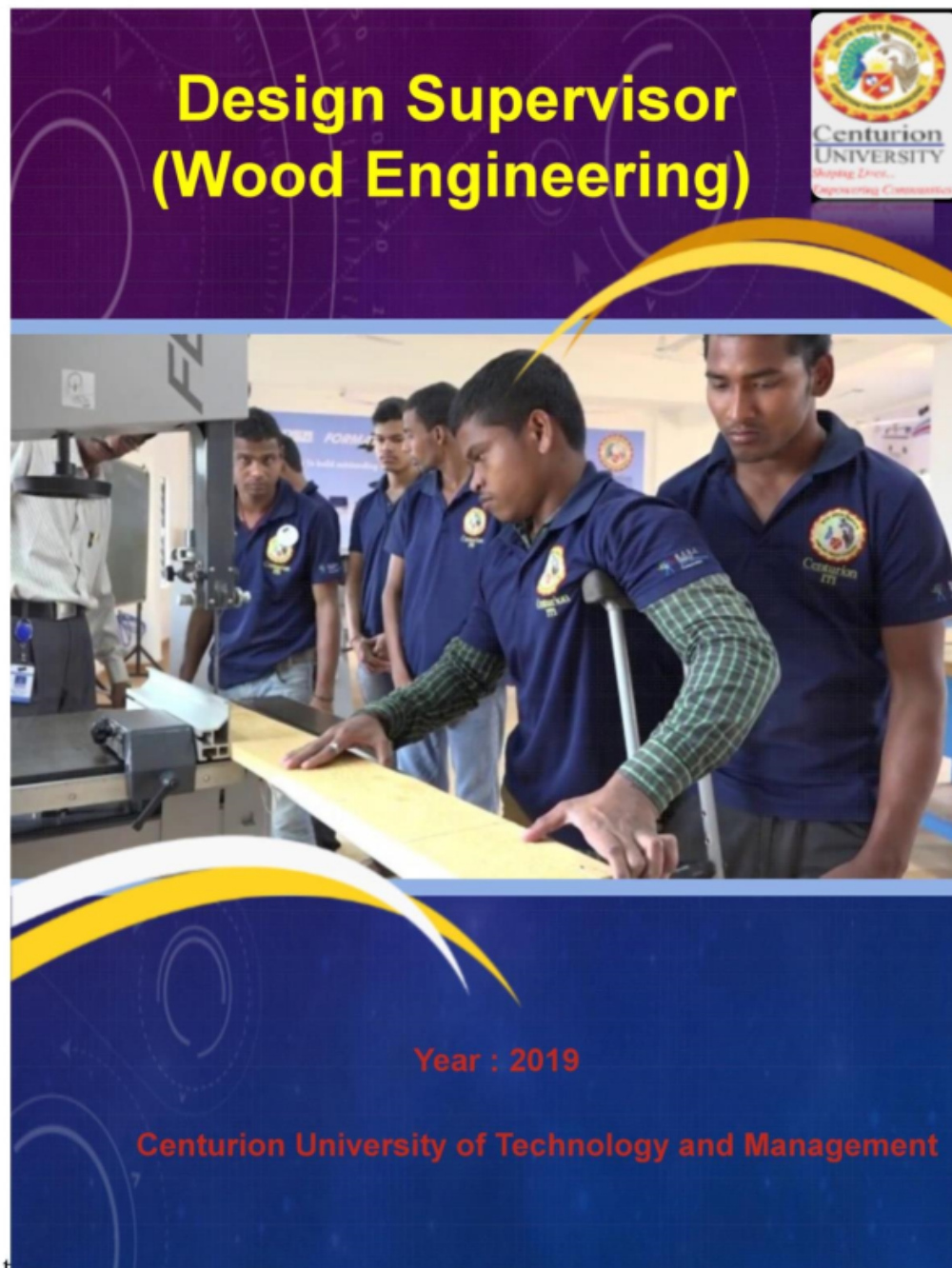


## 14. DESIGN SUPERVISOR

Year:2019-20

### Event Description:

This Design Supervisor (Wood Engineering) webinar was organized on the year of 2019-20, By Centurion University of Technology and Management





Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- ‡ To provide indepth technical training & knowledge of machining technologies and machinery based on Wood Engineering, which would strengthen product development and industrial-institutional partnership.

### Learning Outcomes:

- ‡ Operative machine tools effectively & efficiently
- ‡ Produce components/products by executing various operations with desired accuracy & finish

Module	Contents	Duration
Module1	<b>Practice</b> <ul style="list-style-type: none"><li>• Work Organization and Management (Safety &amp; Serviceability)</li><li>• Reading</li><li>• Interpreting Drawings</li><li>• Setting Out and Measuring</li></ul>	10 hours
Module2	<b>Practice</b> <ul style="list-style-type: none"><li>• Advanced Machine Tools</li><li>• Carpentry Hand Tools</li><li>• Basic Working Principles and Operations</li></ul>	10 hours
Module3	<b>Practice</b> <ul style="list-style-type: none"><li>• Wood Joints and Structural Assemblies</li><li>• Forming Joints and Preparing Members for Assembly</li><li>• Assembling</li><li>• Fastening</li><li>• Finishing</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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## 15. APPAREL PRODUCTION

Year: 2019-20

### Event Description:

This Apparel Production & Marketing webinar was organized on the year of 2019-20 which will increase the idea of Apparel Production as well as Marketing.

# Apparel Production & Marketing



Year : 2019

Centurion University of Technology and Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1 Understand the organization and structure of the global textile/apparel complex.
- 2 Develop textile/apparel products for specific target markets to meet expectations for cost and quality (materials, performance, and aesthetics).
- 3 Demonstrate effective leadership, teamwork, and communication skills.
- 4 Plan, develop, and present merchandise lines for identified market segments.
- 5 Understand the basic decisionmaking, production, and creative processes involved in the conversion of materials to finished textile/apparel products.
- 6 Complying to the industry specifications, guidelines and safety standards during work.

### Learning Outcomes:

- 1 Examining the buyer requirement, understanding and communicating them to the specific departments and exhibiting the product to the buyers they need.
- 2 Confirming the quality during production as well as ensuring timely delivery of an order.
- 3 Developing a time and action (TNA) calendar for completing the schedules of various activities like cutting, sewing, finishing, dispatch etc. The WIP (work in progress) and status of the order have to be monitored by the merchandisers regularly.
- 4 Coordinating and tracking the sourcing activities and confirming that all the raw materials and accessories are delivered on time.
- 5 Followup of post shipment activities to keep a **long** relationship with the buyer.

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>• Work Organization and Management</li> <li>• Practice: Discipline, hygiene, safety, and effective communication.</li> <li>• Planning to achieve production target</li> <li>• Practice: Detailed garment analysis and familiarization with day-day production activities</li> <li>• Practice: Mock production by assembly line system</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• Supervise all activities performed by operators and evaluate their performance</li> <li>• Practice: Identify and carry out operations using different machines.</li> <li>• Practice: SAM calculation for each operator.</li> <li>• Operation Sequence Development</li> <li>• Practice: Production grid for garment construction, development of production flowchart.</li> <li>• Practice: Guidelines for bundle ticket design, functions of bundle tickets, bundle ticket control.</li> <li>• Line balancing &amp; Plan Layout Definition</li> <li>• Practice: How to input a new style in the production line.</li> <li>• Practice: How to balance the line.</li> <li>• Practice: Layout making</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• Apparel Marketing</li> <li>• Practice: Marketing research types of markets: Retail and wholesale strategies for merchandise distribution retailers.</li> <li>• Practice: Sourcing flows and practices.</li> <li>• Practice: Marketing labelling and licensing.</li> <li>• Practice: Awareness of the current market trend.</li> </ul>	10 hours

**TOTAL 30 hours**

Convener



## 16. Webinar on Launching New Product in 100 days from Concepts to Manufacturing

### Event Description:

The webinar on Launching New Product in 100 days from Concepts to Manufacturing was organized on 18<sup>th</sup> June 2020

Join Us for Live Session with Industry Experts

On Thursday, 18th June 2020  
4.00PM

Live Session by  
**PROF. D.N.RAO**  
Vice President and Co-Founder of Centurion University, Odisha

Topic  
Launching New Product in 100 days from Concepts to Manufacturing

Join the Webinar Series 'To Guide Students select Meaningful Projects' by La Fondation Dassault Systemes, India

DASSAULT SYSTEMES  
— La Fondation —

Convener



## 17. Webinar on Career prospects & opportunities post COVID 19

Event Description:

The webinar on Career prospects & opportunities post COVID 19 was organized on 25th June 2020



Convener





## 18. Webinar on FLO Learning series on Retail and Hospitality

### Event Description:

The webinar on FLO Learning series on Retail and Hospitality was organized on 30<sup>th</sup> June 2020

**FICCI FLO**  
The Power to Empower

Date: 30<sup>th</sup> June 2020  
11 am to 12 noon

**Ms. Dharitri Patnaik**  
Chairperson of FLO Bhubaneswar & Committee Members

Invite you to

# FLO Learning Series on Retail & Hospitality

Webinar link: YouTube [shorturl.at/gh246](https://shorturl.at/gh246)

**SPEAKER**  
**Moksh Chopra**  
Chief Marketing Officer  
KFC at Yum! Brands

**SPEAKER**  
**Aman Lal**  
Chief People Officer  
KFC at Yum! Brands


Organizing Committee:  
Namrita Chahal, Tanvi A Hans & Sucheta Mahanty Khatoil | Further details at: [www.gtetonline.com](http://www.gtetonline.com)

In Partnership with  
Centurion University  
[www.grantthornton.in](http://www.grantthornton.in)

FICCI FLO Bhubaneswar

Convener



Anita Patra 

Dr. Anita Patra, Registrar, CUTM



2018-2019



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Awareness of Trends in Technology

(Circulars/Brochures)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

CORPORATE OFFICE  
HIG-4 | JAYADEV VIHAR |  
OPPOSITE PAL HEIGHTS | BHUBANESWAR |  
KHURDA | ODISHA | INDIA | PIN - 752050

CAMPUS  
BHUBANESWAR | PARLAKHEMUNDI | RAYAGADA |  
BOLANGIR  
[WWW.CUTM.AC.IN](http://WWW.CUTM.AC.IN)

This document contains the brochures of the events under Awareness of Trend in Technology conducted during 2018-19.

### List of Events

S. No.	Events	Participants
1	Cyber Security: System and Network Security	53
2	Cyber Security: Advanced hacking Techniques	59
3	Advanced JAVA Programming	70
4	Web Programming Using AngularJS	45
5	Web Services Using JAVA	45
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8	Cloud Technology AWS Developer	50
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11	PLM Tools on Dassault Platform	45
12	Advanced Robotics	43
13	X- Ray Technician	48
14	Fundamentals of Computer Application (SOAS)	48
15	Cell Site & BTS Operation & Maintenance	42
16	Solar PV Installer	41
17	Rf Planning & Drive Test	42
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20	Digital Manufacturing using Delmia	60
21	Embedded Systems Design	

Anita Patra



Dr. Anita Patra, Registrar, CUTM

## 1. Cyber Security System and Network Security

**Event Description:** Cyber Security System and Network Security webinar was organized on the year of 2017-18. It Gives Idea about Different Cyber-attacks and Linux Administration

# Cyber Security System and Network Security



22 August 2018

Centurion University of Technology and Management





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Develop skills to manage a Linux server and provide basic security to the server
- ‡ To train students in the organizing and the technical realization and security of data

### Learning Outcomes:

- ‡ Able to setup Linux server
- ‡ Describe the ways in which the security of an information system can be endangered
- ‡ Suggest the optimal way to organize information system security

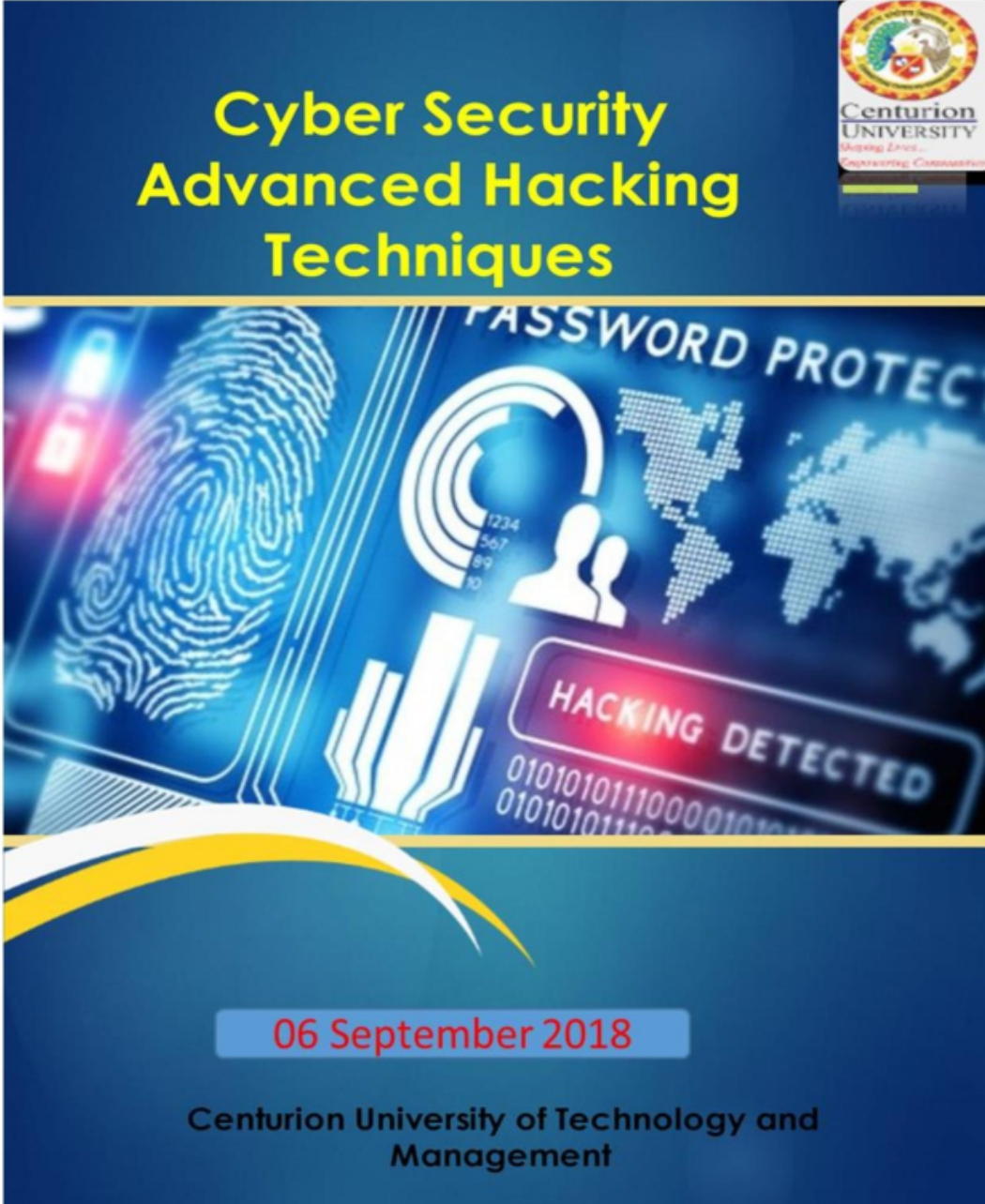
Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Introduction to systems and networks</li> <li>• Threats, Defense against online threats</li> <li>• Threat modeling and risk assessments, malware, exploit kits</li> </ul>	10 hours
Module-2	<ul style="list-style-type: none"> <li>• Web application security principles, application design &amp; development security</li> <li>• Environment and controls, Essence of secure software development</li> <li>• Foundations of operating system security and privacy functionality</li> </ul>	10 hours
Module-3	<ul style="list-style-type: none"> <li>• Windows 10 privacy issues</li> <li>• OS Hardening</li> <li>• Defense against tracking</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

Convener



## 2 Cyber Security Advanced Hacking Techniques

**Event Description:** This Cyber Security Advanced Hacking Techniques webinar was organized on the year of 2017-18. It Gives Idea about LINUX Server and Optimal way to Organize information security in the system.



The poster features a dark blue background with a central graphic. The graphic includes a glowing fingerprint, a world map, a circular progress indicator, and a red alert box that says "HACKING DETECTED". Above the alert box, the text "PASSWORD PROTECT" is visible. The Centurion University logo is in the top right corner. At the bottom, the date "06 September 2018" is displayed in a red box, and the university's name "Centurion University of Technology and Management" is written below it.

# Cyber Security Advanced Hacking Techniques

Centurion  
UNIVERSITY  
Shaping Lives...  
Empowering Communities

PASSWORD PROTECT

HACKING DETECTED

0101010111000010101010

0101010111000010101010

06 September 2018

Centurion University of Technology and  
Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Develop skills to manage a Linux server and provide basic security to the server
- ‡ To train students in the organizing and the technical realization and security of data

### Learning Outcomes:

- ‡ Able to setup Linux server
- ‡ Suggest the optimal way to organize information system security

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• What is zero day vulnerability and how it works.</li> <li>• Replay attack, pass the hash</li> <li>• Hijacking, Clickjacking, Session hijacking, URL hijacking</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Typo squatting, Manipulating Driver, Shimming</li> <li>• Refactoring, Pivot, Initial exploitation, Persistence</li> <li>• Techniques of Penetration Testing, vulnerability scanning</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Passively test Security Controls</li> <li>• Identifying vulnerability, lack of security control, common misconfigurations</li> <li>• Intrusive vs non intrusive, Credentialed vs non - credentialed, False positive</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

convener



### 3 Advanced JAVA Programming

**Event Description:** This Advanced JAVA Programming webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.



The poster features a yellow top section with the title "Advanced JAVA Programming" in bold yellow text. In the top right corner is the Centurion University logo, which includes a circular emblem with a book and a lamp, and the text "Centurion UNIVERSITY" with the tagline "Shaping Lives... Inspiring Communities". The middle section is a dark blue background with white Java code snippets, including "if(parameters.contains(...))", "hql += \" and p.name = :name;\"", "TypedQuery<Person> query = em.createQuery(hql, Person.class)", and "Integer.valueOf(values[1])". The bottom section is orange with a white box containing the date "11<sup>th</sup> September 2018" and the university name "Centurion University of Technology and Management" below it.

# Advanced JAVA Programming

Centurion UNIVERSITY  
Shaping Lives...  
Inspiring Communities

```
string ...  
if(parameters.contains("name")){  
    hql += " and p.name = :name";  
}  
8 if(parameters.contains("age")){  
9     hql += " and p.age = :age";  
10 }  
11 TypedQuery<Person> query = em.createQuery(hql, Person.class);  
12 if(parameters.contains("name")){  
13     query.setParameter("name", values[0].toString());  
14 }  
15 if(parameters.contains("age")){  
16     query.setParameter("age", Integer.valueOf(values[1].toString()));  
}
```

11<sup>th</sup> September 2018

Centurion University of Technology and Management





Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- ‡ Develop knowledge -based force to serve the IT industry with the latest technologies.
- ‡ To learn and explore Spring Framework, Android, AngularJS, GIT.

### Learning Outcomes:

- ‡ To analyze, design, and develop SRS.
- ‡ To design and develop Android Applications.

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"><li>• Understanding Web Architecture</li><li>• Installation and configure java environment.</li><li>• Understanding MVC Architecture</li></ul>	10 hours
Module -2	<ul style="list-style-type: none"><li>• Create GIT repository for version control and teamwork</li><li>• Create a web project and define a landing page.</li><li>• Create controller using servlet in web project</li></ul>	10 hours
Module -3	<ul style="list-style-type: none"><li>• Retrieve value from page in controller through the request parameter.</li><li>• Establish Connection with database</li><li>• Perform CRUD operation</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



Convener

#### 4 Web Programming Using AngularJS

**Event Description:** Web Programming Using AngularJS, webinar was organized on the year of 2017-18. It Gives idea about develop application and web service using spring boot and Angular JS.

The poster features a central red shield with a white 'A' logo. Surrounding the logo are four circular icons connected by lines: a code symbol (</>), a folder icon, a gear icon, and a JavaScript file extension (.js). The text 'AngularJS' is prominently displayed below the logo. The background is a dark blue gradient with a wood-grain border at the top and bottom.

**Web Programming  
Using AngularJS**

Centurion  
UNIVERSITY  
Rising 21st  
Empowering Connections

</> Write Less Code

Two-Way Data Binding


Re-Usable HTML Components

{.js} Power of MVVM

**AngularJS**

09 October 2018

Centurion University of Technology and Management



**Prerequisites:** Nil  
**Course Type :** Audit (Workshop)  
**Duration :** 30 Hours

### Course Objectives:

- ‡ Develop knowledge based force to serve the IT industry with the latest technologies.
- ‡ To explore methods of capturing, specifying, visualizing and analyzing software requirements.

### Learning Outcomes:

- ‡ To analyze, design, and develop SRS.
- ‡ To design and develop web applications using Spring, AngularJS.

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Create AngularJS app and configure the environment</li> <li>• Understanding AngularJS Architecture</li> <li>• Get different value in page with AngularJS Expressions</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• Filtering data using AngularJS Filter</li> <li>• Creating Custom Filters</li> <li>• Working with Directives and Creating a custom directive</li> <li>• Working with Tables, \$index, \$even &amp; \$odd</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• Working with ng-disabled directive, ng-show directive, ng-hide directive</li> <li>• Define controller in angularJS application</li> <li>• Understanding scope and globalScope in controller and view</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



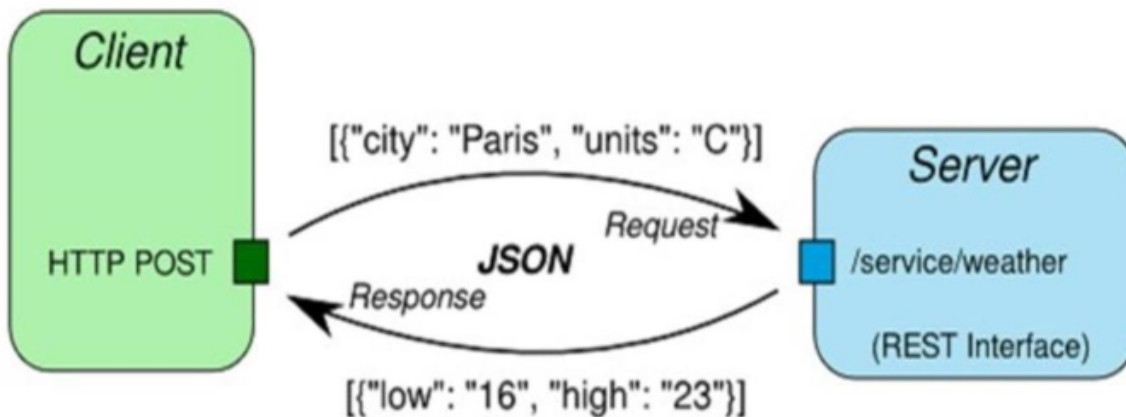

Convener

## 5 Web Services Using JAVA

**Event Description:** This Web Services Using JAVA webinar was organized on the year of 2017-18. It Gives idea about analyze, design and develop of SRS.



### RESTful Web Service in Java

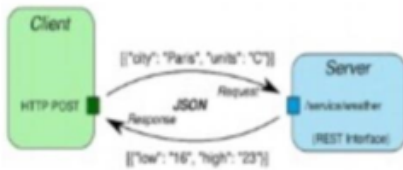


17 October  
2018

Centurion University of Technology and Management



### RESTful Web Service in Java



Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- 1 Develop knowledge based force to serve the IT industry with the latest technologies.
- 1 To explore methods of capturing, specifying, visualizing and analyzing software requirements.

### Learning Outcomes:

- 1 To analyze, design, and develop SRS.
- 1 To design and develop web applications using Spring, AngularJS.

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"><li>• Setting Spring environment</li><li>• Understanding Maven and define POM</li><li>• Create project using Spring and Understanding Spring Architecture</li></ul>	10 hours
Module-2	<ul style="list-style-type: none"><li>• Setting bean in IOC container and understand Dependency Injection</li><li>• Working with Spring AOP</li><li>• Access data using JdbcTemplate; CRUD operation</li></ul>	10 hours
Module-3	<ul style="list-style-type: none"><li>• Create Spring Boot projects using SpringInitializer</li><li>• Implement DevTools for rapid application development</li><li>• Implement application logs using application. Properties</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



Convener

## 6 Process Management (Using Enovia)

**Event Description:** Process Management (Using Enovia) webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.

# Process Management ( Using Enovia )



19 October 2018

**Centurion University of Technology and  
Management**



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Familiarize the student with Industrial Product Life Cycle Management Processes
- ‡ Teach Dassault tools for PLM
- ‡ Develop digital prototypes of the products and validate them and innovate for design efficiency

### Learning Outcomes:

- ‡ A Digitally Validated Innovatively and efficiently designed product
- ‡ Experience with 3 D experience platform Catia - Simulia- Dymola and Enovia tools

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to project management, Project Definition, Project Initiation</li> <li>• Need for Project Management</li> <li>• Provide vision and direction, increase efficiency, Control.</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Project scope, manage costs, manage time, Schedule the work</li> <li>• Deal with potential risks</li> <li>• Project Management Principles, Project structure, Clear goals</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Transparency about project status, Risk recognition,</li> <li>• The Project Life Cycle: The project initiation stage, The project planning stage, The project execution stage, The project closure stage</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>


Convener



7 Design Thinking and Managing Innovation Through GATE Process

**Event Description:** Design Thinking and Managing Innovation Through GATE Process, webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.

## Design Thinking and Managing Innovation Through GATE Process

  
**Centurion UNIVERSITY**  
*Shaping Lives... Engineering Communities*

**Standard Stage-Gate (TRL 1-6)**

2 Evaluate → 3 Design, verify, and accept → 4 Launch → 5 Lifecycle Management

CDR (under 2); Design, Verify, Accept (under 3); DDR, RTA, RTL (under 3)

**Moderate Stage-Gate (TRL 7-8)**

1 Define → 2 Evaluate → 3 Design, verify, and accept → 4 Launch → 5 Lifecycle Management

CDR (under 2); DDR, RTL (under 3)

**Light Stage-Gate (TRL 9)**

3 Design, verify, and accept → 4 Launch → 5 Lifecycle Management

DDR (under 3)

31  
October  
2018

Centurion University of Technology and Management





Prerequisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1 Value creation process
- 1 Creating unique consumer experience

### Learning Outcomes:

- 1 A Lean approach: Digitized Lean practices offer intuitive tools that leverage Lean methodologies to reduce or eliminate nonvalue added work and ensure efficient processes.
- 1 Project management methodology: Quality methods are governed as projects with automated and evdriven tasks, change orders and actions, and a modelled enterprise approach for requirements and functions.

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Compass Content</li> <li>• 3DSwym</li> <li>• 3DDrive</li> <li>• Native App</li> </ul>	10 hours
Module-2	<ul style="list-style-type: none"> <li>• Improved productivity with User Groups</li> <li>• Foster social innovation with 3DSwym</li> <li>• Share securely Confidential files with 3DDrive</li> </ul>	10 hours
Module-3	<ul style="list-style-type: none"> <li>• Enable PLM collaboration with 3DSpace</li> <li>• Bookmark workspace</li> <li>• Baseline Access to Content</li> <li>• Issue Management</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



Convener

## 8 Cloud Technology, AWS Developer (DVA-CO1)

**Event Description:** This webinar Cloud Technology, AWS Developer (DVA-CO1) was organized on the year of 2017-18. By Centurion University of Technology and Management.

# Cloud Technology, AWS Developer (DVA-CO1)



01<sup>st</sup> November 2018

Centurion University of Technology and Management



Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- 1 To learn core services of AWS
- 1 Learn how to use resources in Cloud

### Learning Outcomes:

- 1 Able to design and deploy application using Services of AWS
- 1 Able to develop scalable and secure Cloud applications

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"><li>• AWS Identification and Access Management</li><li>• Amazon Elastic Load Balancing and Auto Scaling Group</li><li>• Amazon Elastic Block Store and Elastic File System</li></ul>	10 hours
Module-2	<ul style="list-style-type: none"><li>• AWS RDS</li><li>• AWS ElastiCache and its strategies</li><li>• Amazon Route 53</li></ul>	10 hours
Module-3	<ul style="list-style-type: none"><li>• AWS VPC</li><li>• AWS CLI, SDK, IAM Roles &amp; Policies</li><li>• Amazon S3</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



Convener

## 9 Cloud Technology, AWS Solution Architect (SAA-CO2)

**Event Description:** This Cloud Technology, AWS Solution Architect (SAA-CO2) webinar was organized on the year of 2017-18. It Gives Idea about AWS Cloud value and implementation.

The poster features a blue top section with the title "Cloud Technology, AWS Solution Architect (SAA-CO2)" in yellow. The Centurion University logo is in the top right. The middle section is orange with icons for AWS Certified, a certificate, a laptop, a server rack, and a globe. The bottom section is blue with a white oval containing the date "12 November 2018" and the university name "Centurion University of Technology and Management".

**Cloud Technology, AWS  
Solution Architect (SAA-  
CO2)**

**Centurion  
UNIVERSITY**  
Shaping Lives...  
Empowering Communities

**12 November  
2018**

**Centurion University of Technology and  
Management**





Pre-requisites: Nil  
Course Type : Audit  
(Workshop)  
Duration : 30 Hours

### Course Objectives:

- ‡ Understanding fundamentals of Cloud and its basic infrastructure
- ‡ Learn about account management, billing and pricing

### Learning Outcomes:

- ‡ Explain AWS cloud values and Implement different policies using its services
- ‡ Analyze and manage billing and pricing used for the resources

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"><li>• Overview of Cloud Concepts and Billing</li><li>• Overview of Cloud Computing, Advantages of the Cloud, Overview of AWS, AWS Organizations, Fundamentals of Pricing, Total Cost of Ownership, Simple Monthly Calculator, AWS Billing &amp; Cost Management, Billing Dashboard, AWS Whitepapers &amp; Documentations</li></ul>	10 hours
Module -2	<b>Cloud Security</b> AWS Global Infrastructure, AWS Management Console, AWS Services & Service Categories, AWS Shared Responsibility Model, Cloud Security, AWS Identity and Access Management, Securing Accounts, Securing Data, Working to Ensure Compliance.	10 hours
Module -3	<b>Networking and Content Delivery</b> Networking Basics, Amazon Virtual Private Cloud, VPC Security, Build Your VPC and Launch a Web Server, Amazon Route53, Content Delivery Networks, Edge Location, Amazon CloudFront	10 hours
<b>TOTAL</b>		<b>30 hours</b>

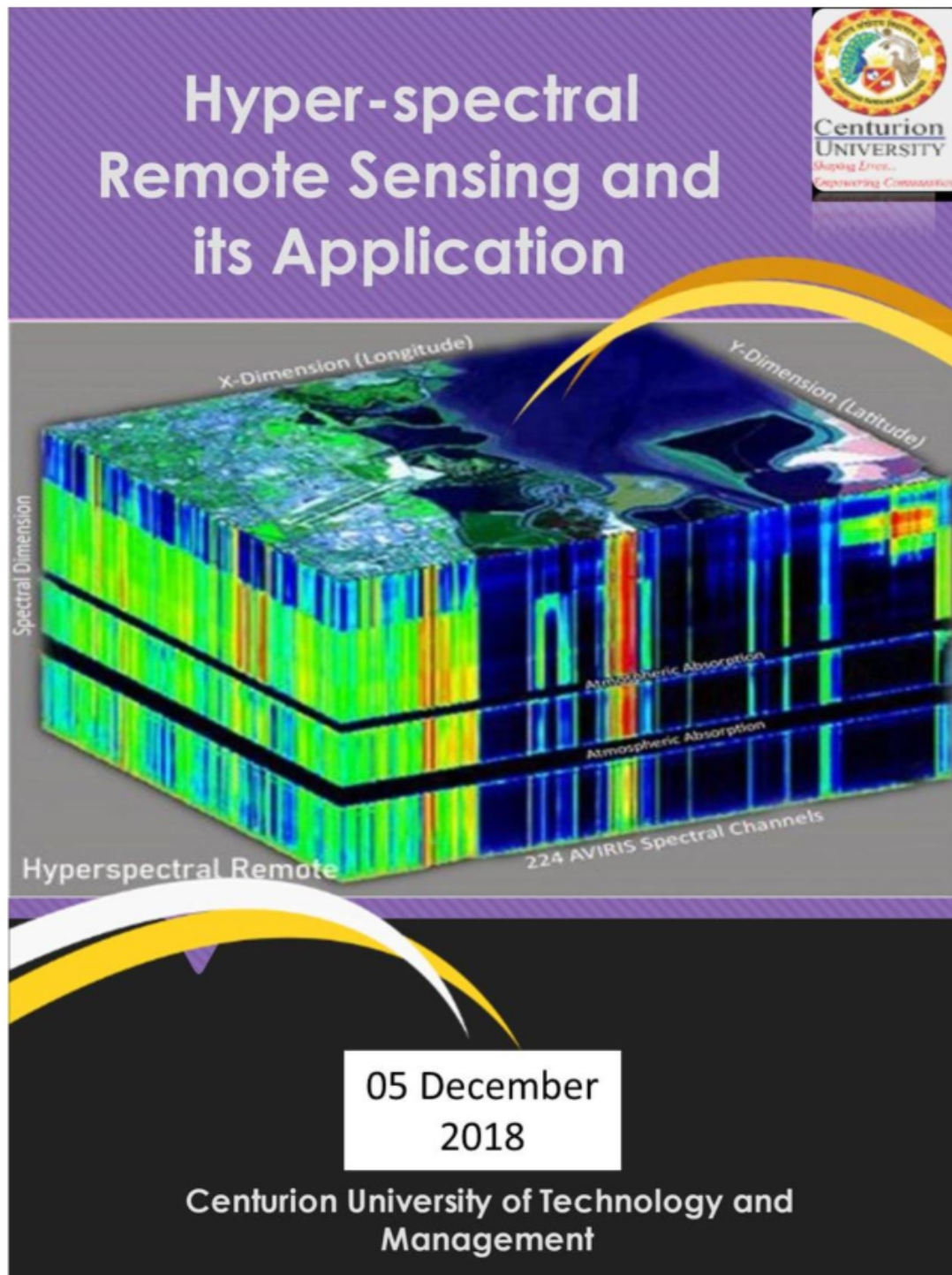
A handwritten signature in black ink, appearing to read 'Surya', with a horizontal line underneath.



Convener

## 10 Hyper-spectral Remote Sensing and its Application

**Event Description:** Hyper-spectral Remote Sensing and its Application, webinar was organized on the year of 2017-18. It Gives idea about evaluating data and effective mapping.



The poster features a central 3D visualization of a hyperspectral data cube. The top surface is a false-color satellite image of a landscape with a river and fields. The vertical axis is labeled 'Spectral Dimension' and the horizontal axes are 'X-Dimension (Longitude)' and 'Y-Dimension (Latitude)'. The data is represented as a stack of vertical slices, with two horizontal lines indicating 'Atmospheric Absorption' bands. The bottom of the cube is labeled '224 AVIRIS Spectral Channels'. The text 'Hyperspectral Remote' is visible at the bottom left of the cube. The Centurion University logo is in the top right corner. The date '05 December 2018' is in a white box, and the university name is at the bottom.

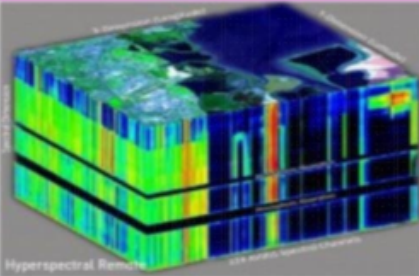
# Hyper-spectral Remote Sensing and its Application

Centurion UNIVERSITY  
Shaping Lives... Empowering Communities

X-Dimension (Longitude)  
Y-Dimension (Latitude)  
Spectral Dimension  
Atmospheric Absorption  
Atmospheric Absorption  
224 AVIRIS Spectral Channels  
Hyperspectral Remote

05 December  
2018

Centurion University of Technology and Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Apply the principles of Remote Sensing and GIS to collect, map and retrieve spatial information.
- ‡ Plan, assess and evaluate natural and manmade systems using geospatial models and methods.
- ‡ Use geospatial tools and techniques for natural resources planning and management.

### Learning Outcomes:

- ‡ Identify specific data and methodologies for effective mapping and evaluation of natural resources.
- ‡ Develop geospatial models and tools to address the social and engineering problems
- ‡ Design multi -criteria geospatial systems for decision making process

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to ENVI, Python and Downloading, Displaying, and Analyzing Hyperspectral Imagery</li> <li>• Atmospheric Correction of Hyperspectral Imagery.</li> <li>• MNF ratioing from Hyperspectral(EO1)</li> <li>• Hyperspectral Image Classification Using Spectral Angle Mapper (SAM) &amp; Spectral Feature Fitting (SFF).</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Hyperspectral Imagery Classification Using an Unsupervised Neuron fuzzy System.</li> <li>• Application of Hyperspectral Imagery in Geological Studies.</li> <li>• Hyperspectral Signatures &amp; Feature Fitting.</li> <li>• Hyperspectral Remote Sensing for Agriculture and soil Studies.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Hyperspectral Remote Sensing for Forestry Applications.</li> <li>• Hyperspectral Remote Sensing for Urban Studies.</li> <li>• Mineral identification from Hyperspectral imagery</li> <li>• Python Programming for Hyperspectral data analysis.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



Convener

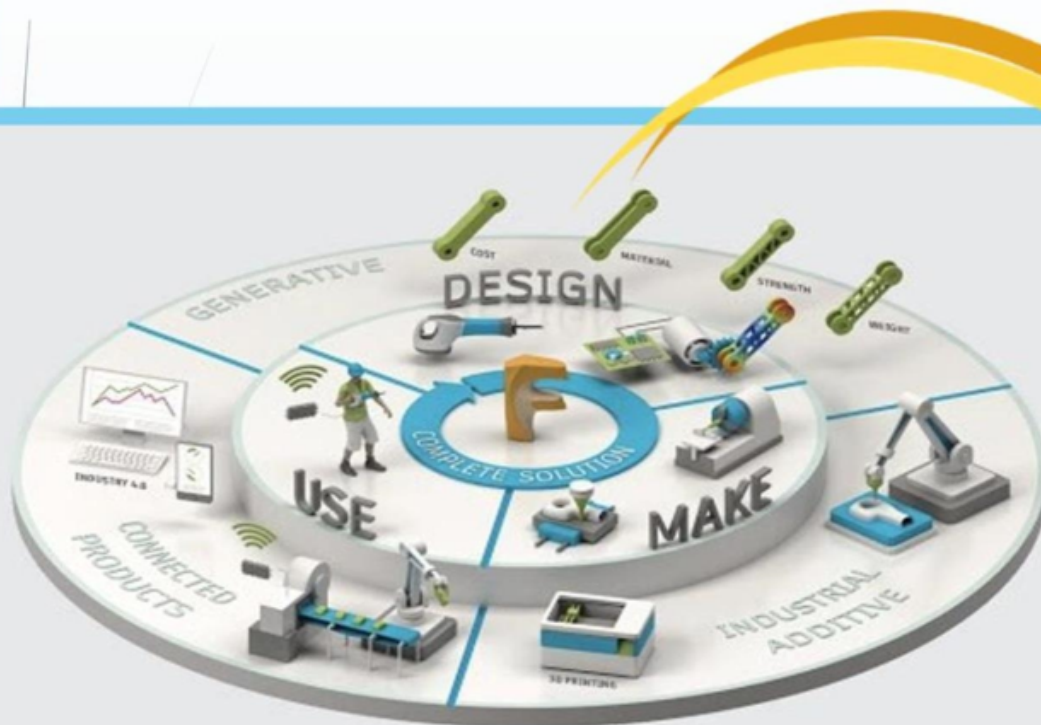


## 11 PLM Tools on Dassault Platform

**Event Description:** PLM Tools on Dassault Platform webinar was organized on the year of 2017-18. It Gives idea about Understand the behavior of model through input and output data.



# PLM Tools on Dassault Platform



19 December 2018

**Centurion University of Technology and  
Management**





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ To make student learn how to simulate the model using software.
- ‡ To make student learn how to develop a prototype model and test it in real conditions.

### Learning Outcomes:

- ‡ To Understand the behavior of the model through input n output data
- ‡ Customizing the product properties

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• System Engineering Damola</li> <li>• Finding energetic dimension of the desired product</li> <li>• Designing system and subsystem using behavior modelling work bench</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• System Integration with product dimension.</li> <li>• Functional and logical design of integrated product in system engineering.</li> <li>• 3-D Model using CATIA</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• CATIA part design of different components</li> <li>• Surface designing for creating high end complex design</li> <li>• Assembly Designing of the complete product</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

Convener



## 12. ADVANCED ROBOTICS

YEAR- 2019

### Event Description:

This Advanced Robotics webinar was organized on the year of 2019 By Centurion University of Technology and Management, which gives the basic concepts of robot like – its architecture, working and more.



The image is a promotional graphic for an "Advanced Robotics" webinar. It features a teal background with a central photograph of a yellow industrial robotic arm in a factory setting. The text "Advanced Robotics" is written in large, bold, yellow letters across the top. In the top right corner, there is a circular logo for Centurion University of Technology and Management, with the motto "Being Different... Defining Conventions." below it. At the bottom, the date "Date : 16/01/2019" and the university's name "Centurion University of Technology and Management" are displayed in white text. The graphic is decorated with yellow and white curved lines.

# Advanced Robotics

Centurion  
UNIVERSITY  
Being Different...  
Defining Conventions.

Date : 16/01/2019

Centurion University of Technology and Management



### Course Objectives:

Now a days everything is getting automated so as our daily works also like our vehicle, our house hold electrical systems etc. So the ROBOT is also becoming our daily life partner. It helps in cleaning our houses, cooking our food, medical surgeries, guiding robots, fire extinguisher robot etc. So it is now latest technology to be learnt and implemented.

### Learning Outcomes:

The trainees will learn what are the basic concepts of robots like architecture, working, controlling and there working environment. They will have a basic knowledge of robotic control, sensor operation and control and interfacing of hardware and software.

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>SENSORS</li> <li>Selecting sensors as per the project. Specification checking of sensors, interfacing of sensor to controllers.</li> <li>Practice</li> <li>TILT, PROXIMITY, TEMPERATURE, HUMIDITY, SMOKE, FINGERPRINT</li> <li>BLUETOOTH, ESP8266, GPS, GSM</li> <li>MOTOR'S &amp; ACTUATOR'S CONTROLLER</li> <li>Servo motor and controller, Stepper motor &amp; controller, Dc motor controller and other output field devices.</li> <li>Practice</li> <li>1. Operation and control of servo motor</li> <li>2. Operation and control of stepper motor</li> <li>3. Operation control of DC motor</li> <li>4. Output devices solenoid valves, relay, plunger</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>CONTROLLERS AND INPUT/OUTPUT HANDLING</li> <li>Concept of 8951 controller, Concept of Arduino and concept of Raspberry Pi.</li> <li>Practice</li> <li>Port handling of 8951</li> <li>Port handling of Arduino</li> <li>Port handling of Raspberry Pi</li> <li>SEQUENTIAL ROBOT CONTROL</li> <li>Designing of sequential robot control system.</li> <li>Writing of programs in different programming languages. Controlling of input/output devices.</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>Practice</li> <li>Programming of controllers with different programming languages.</li> <li>Designing of sequential control robot.</li> <li>Projects</li> <li>Mobile controlled robot</li> <li>Autonomous operated robot.</li> <li>Location targeted robot</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*H. Chakraborty*

Convener

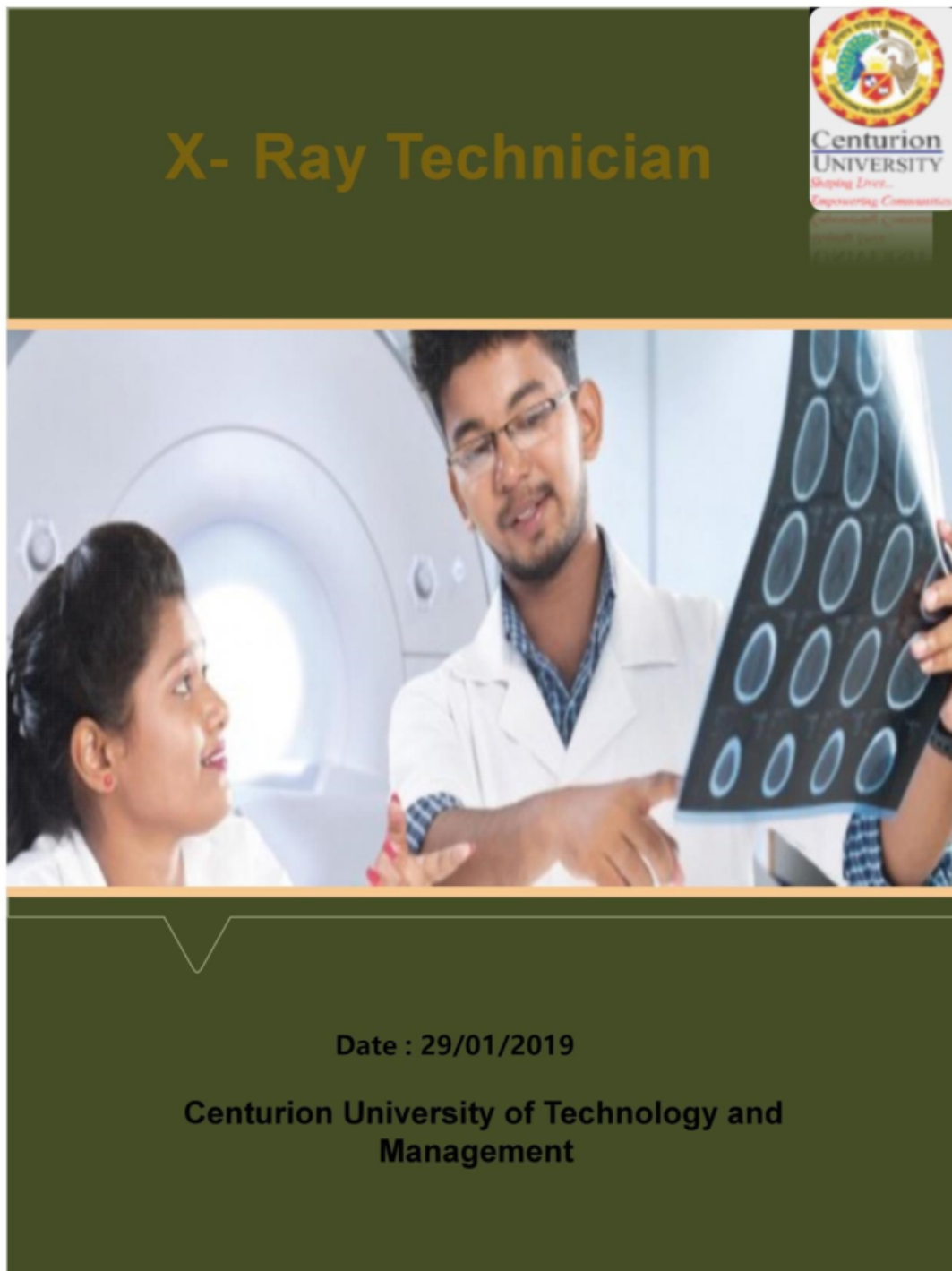


### 13. X- Ray Technician

Year:2019

#### Event Description:

This X-Ray Technician webinar was organized on the year of 2019-20 By Centurion University of Technology and Management



The image is a promotional graphic for an X-Ray Technician webinar. It features a dark green background with a central photograph of a male and female medical professional in white lab coats. The male professional is holding a large X-ray film showing a grid of white oval shapes. In the top right corner, there is a circular logo for Centurion University with the text 'Centurion UNIVERSITY' and 'Shaping Lives... Empowering Communities'. The title 'X- Ray Technician' is written in large, bold, yellow letters across the top. At the bottom, the date 'Date : 29/01/2019' and the university name 'Centurion University of Technology and Management' are displayed in white text.

**X- Ray Technician**

Centurion  
UNIVERSITY  
Shaping Lives...  
Empowering Communities

Date : 29/01/2019

Centurion University of Technology and  
Management





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- Introduction to patient care and lab services.
- To maintain and cleaning lab equipment.
- Expertizing in understanding the doctor's instructions and carrying out the tests as per the patient's health condition.
- Excellent in diagnosing the causes for the illness and communicating the patient's reports to the physician to carry and put the treatment.
- Expertizing in handling various instruments and can even troubleshoot & correct in machines in case of any issues.
- To learn about handling the patients and treating them with the utmost care and helping them in avoiding any misconceptions about their health condition.
- Report writing and documentation in X- RAY laboratory.

### Learning Outcomes:

- Apply knowledge and technical skills associated with X- RAY.
- Demonstrate the ability to plan& implement professional activities.
- Understand professional and ethical responsibility of X -RAY technician.
- To be able to work with modern X- RAY & Imaging laboratory equipment's.
- To be able to maintain the X- RAY laboratory X- RAY lab instruments.
- Distribute the reports .

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to the human body, structure and function</li> <li>• Anatomical positions &amp; planes</li> <li>• Joints classification, cartilage composition, type</li> <li>• Skull-Function, Bones, Nasal Cavity, Vertebral Column</li> <li>• Reproductive System: Male Reproductive System &amp;Female Reproductive System</li> <li>• Introduction to healthcare</li> <li>• Basic understanding of hospital functions</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Manage injuries to head and spine</li> <li>• Video demonstration</li> <li>• Manage respiratory emergency</li> <li>• Signs of respiratory management</li> <li>• Manage severe abdominal pain</li> <li>• Causes associated with the pain</li> <li>• Manage mass casualty incident</li> <li>• Mass casualty management</li> <li>• Manage patient handover</li> <li>• Purpose of a handover</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Manage work to meet the requirement</li> <li>• Objectives of requirement</li> <li>• Maintain a safe, healthy and secure environment</li> <li>• Safe workplace environment</li> <li>• Practice code of conduct while performing duties</li> <li>• Video demonstration</li> <li>• Biomedical waste disposal protocols</li> <li>• Importance of Biomedical waste management</li> <li>• Infection control policies and procedures</li> <li>• Strategies for Infection prevention and control</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

Convener

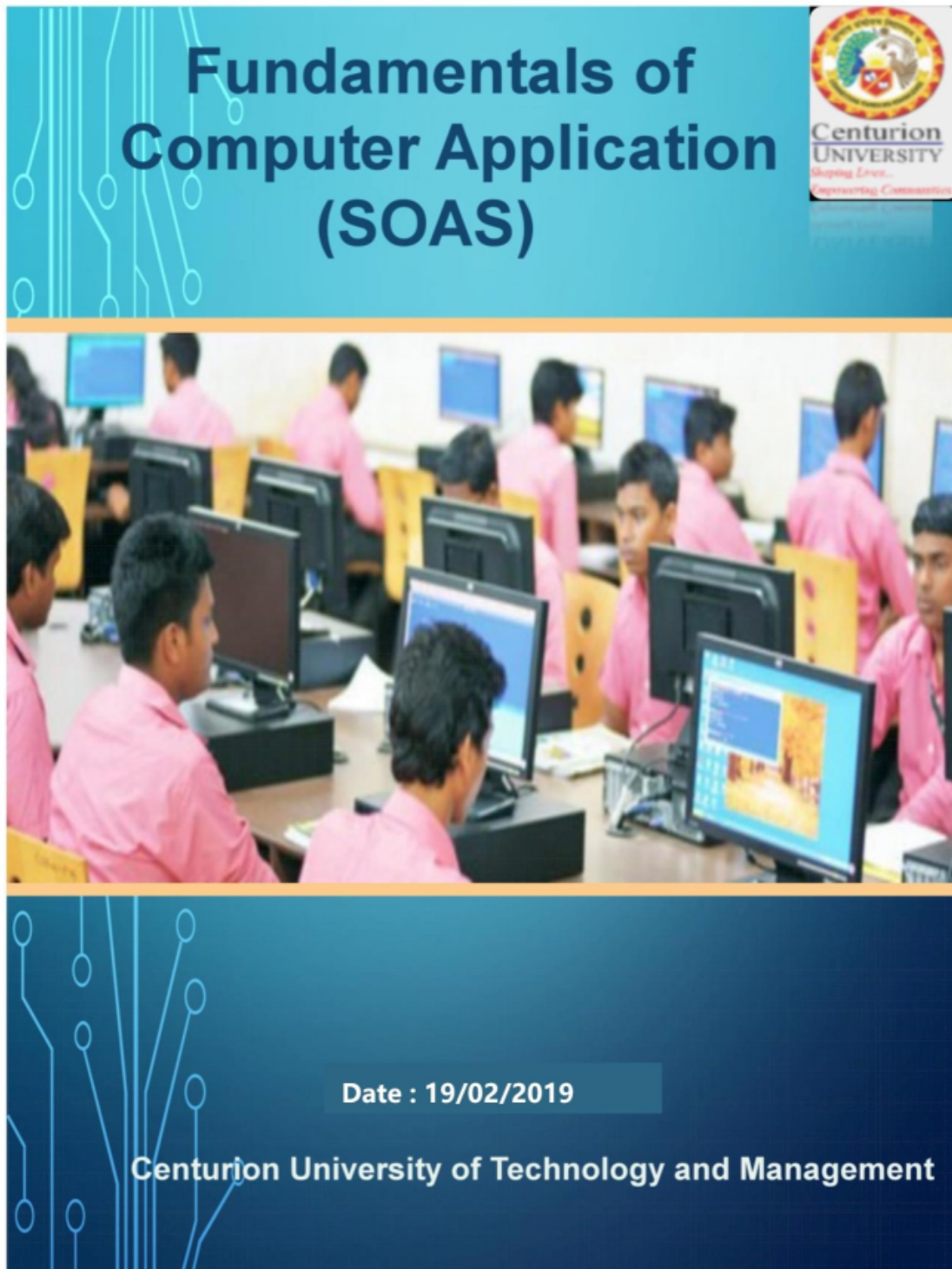


## 14. Fundamentals of Computer Application (SOAS)

Year: 2019

### Event Description:

This Apparel Production & Marketing webinar was organized on the year of 2019-20. Which gives brief idea about computer components and its uses. Organized by School of Applied Science.



**Fundamentals of  
Computer Application  
(SOAS)**

**Centurion  
UNIVERSITY**  
Shaping Lives...  
Empowering Communities

Date : 19/02/2019

**Centurion University of Technology and Management**



## Learning Outcomes:

- 1 Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components.
- 1 Understand the difference between an operating system and an application program, and what each is used for in a computer.
- 1 Describe some examples of computers and state the effect that the use of computer technology has had on some common products

Prerequisites: Nil

Course Type : Audit (Workshop)

Duration : 30 Hours

## Course Objectives:

- 1 Identify the function of computer hardware components.
- 1 Identify the factors that go into an individual or organizational decision on how to purchase computer equipment.
- 1 Identify how to maintain computer equipment and solve common problems relating to computer hardware.
- 1 Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded
- 1 Identify different types of software, general concepts relating to software categories, and the tasks to which each type of software is most suited or not suited.

Module	Contents	Duration
Module1	Computer Basics: A simple model of computers, Digital and Analog Computers, Evolution of digital computers, Major Components of a digital computer, hardware, software, firmware, middle ware, freeware. Input/output Devices: Input Devices, Output Devices, Printers, and Plotters, Other forms of Output devices, Input and Output port.	6 hours
Module2	Number System: Decimal Number System, Binary Number System, conversion of numbers(binary to decimal, decimal to binary), Addition of Binary Numbers, 1's complement and 2's complement representation of numbers, Binary Subtraction, Binary Multiplication, Binary Division, Hexadecimal and octal number system, ASCII and ISCII code, EBCDIC code, Gray codes, Fixed point and Floating Point Representation, Overflow and Underflow.	6 hours
Module3	Logic Circuits: Switching circuits, AND/OR operations, NOT operations, Boolean Functions, Canonical Forms of Boolean Functions, Logic circuits.	6 hours
Module4	Processor: CPU organization, Structure of Instruction, machine level language Computer Memory: Read only memory, Serial Access memory, Main memory, Secondary memory: Magnetic hard disk, Floppy disk Drives, Compact Disk Read Only memory, Magnetic tape Drives.	6 hours
Module5	Computer Architecture: Interconnection of units, Processor to memory communication, I/O to processor communication, Interrupt Structure, Multi programming, Processor Features, RISC, Virtual Memory.	6 hours
<b>TOTAL</b>		<b>30 hours</b>

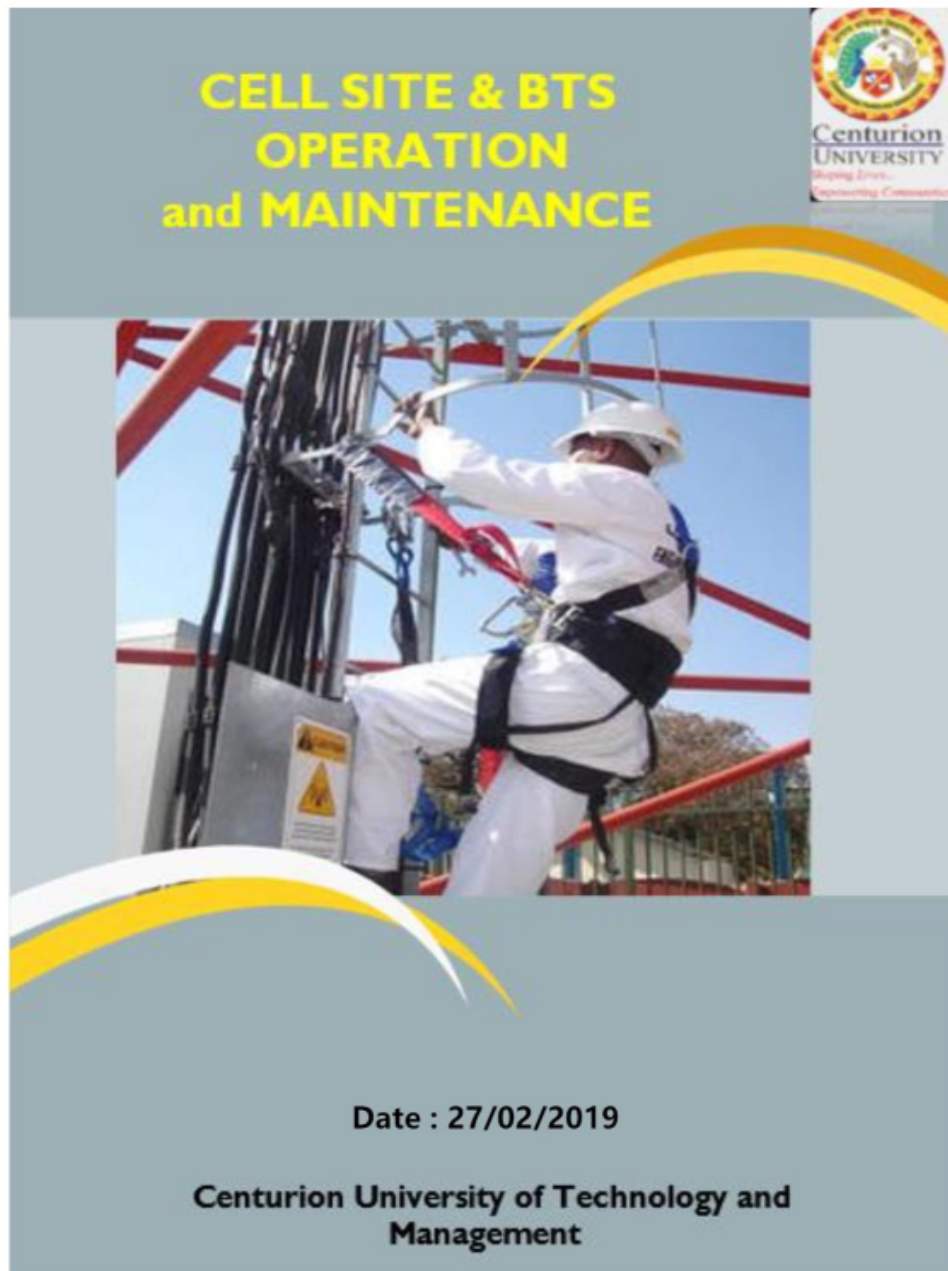
  
Convener



## 15. CELL SITE & BTS OPERATION

Year: 2019

**Event Description:** This Cell Site & BTS Operation and Maintenance webinar was organized on the year of 2019. By Centurion University of Technology and Management. It solves modern challenges on cell and BTS.



**CELL SITE & BTS  
OPERATION  
and MAINTENANCE**

**Centurion  
UNIVERSITY**  
Shaping Lives...  
Empowering Communities

Date : 27/02/2019

**Centurion University of Technology and  
Management**





Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- ‡ Develop the skills required to design a next generation wireless networks
- ‡ To involve the students in the theory and practice of wireless communications

### Learning Outcomes:

- ‡ Various Communications available and its challenges in modern era

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"><li>• Antennas for mobile Tower</li><li>• Power supply at BTS</li><li>• Equipment used in the Shelter</li></ul>	10 hours
Module-2	<ul style="list-style-type: none"><li>• Power Interface Unit (PIU)</li><li>• Line Conditioning Unit (LCU)</li><li>• Free Cooling Unit (FCU)</li></ul>	10 hours
Module-3	<ul style="list-style-type: none"><li>• Preventive Maintenance (PM) &amp; site management</li><li>• Basic functioning of alarm box and the interface</li><li>• Concept on TRX &amp; Baseband receiver unit (BBbox).</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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## 16. SOLAR PV INSTALLER

Year:2019

### Event Description:

This Solar PV Installer webinar was organized on the year of 2019 By Centurion University of Technology and Management

**SOLAR PV INSTALLER**

**Centurion UNIVERSITY**  
Shaping Lives...  
Empowering Communities

**Date : 13/03/2019**

**Centurion University of Technology and Management**



Pre-requisites: Nil  
 Course Type : Audit  
 (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1 Familiarization to the principles, materials, and tools required for solar PV installation
- 2 Develop an end-to-end technical understanding to execute solar PV installation
- 3 Understand the test and commissioning process of Solar PV system
- 4 Complying to the industry specifications, guidelines and safety standards during work.

### Learning Outcomes:

- 1 Assess customer's requirement of solar PV system for specific application
- 2 Implement the knowledge of the basics of electricity, electronics and solar PV
- 3 Concept about load calculation and installation of PV system
- 4 Comply with the safety procedures and standards to be followed
- 5 Prioritizing activities and organizing resources to meet desired outcome

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>• Work Organization and Management</li> <li>• Overview and applications in multiple sectors, Work technical terminology and symbols, theory and applications of mathematics, physics, and geometry, Standards currently used and recognized by industry, Current internationally recognized standards, Health and safety legislation and best practice including specific safety.</li> <li>• Practice-Site visit to acquire knowledge on Solar powered Projects.</li> <li>• Site Survey and Customer's requirement</li> <li>• Practice: Preparation of single line diagram (System layout) of the system</li> <li>• Practice: Identify the load to be connected to the Solar PV system</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• Basics of Electrical, Electronics and Solar Energy</li> <li>• Practice- Identify different Electrical components used in Solar Energy system</li> <li>• Practice- Carry out operation of the electrical components</li> <li>• Practice- Perform simple calculation of power, energy, radiation etc.</li> <li>• Basics of SPV System and Components</li> <li>• Practice- Identify the different components of a SPV system components and it's operation</li> <li>• Practice- Carry out operation of the Solar PV system components</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• Design and Installation of SPV System</li> <li>• Practice- Design and validation of SPV systems</li> <li>• Practice- Design of Offgrid system</li> <li>• Practice- Identify Tools &amp; Tackles used for civil/mechanical/electrical installation</li> <li>• Practice- Installation of Solar Module, CCR/Inverter, Battery and electrical appliances</li> <li>• Testing and Commissioning of SPV System</li> <li>• Practice: Hands on practice of test and commission process in a SPV system</li> <li>• Practice: Operation of each component of the SPV system</li> <li>• Practice: Demonstration of Regulations &amp; Standards of interconnection</li> <li>• Maintenance of SPV System</li> <li>• Practice: Carry out maintenance activities required for each component</li> <li>• Practice: Activities of preventive &amp; reactive maintenance of the plant</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*D. Shrivastava*

Convener

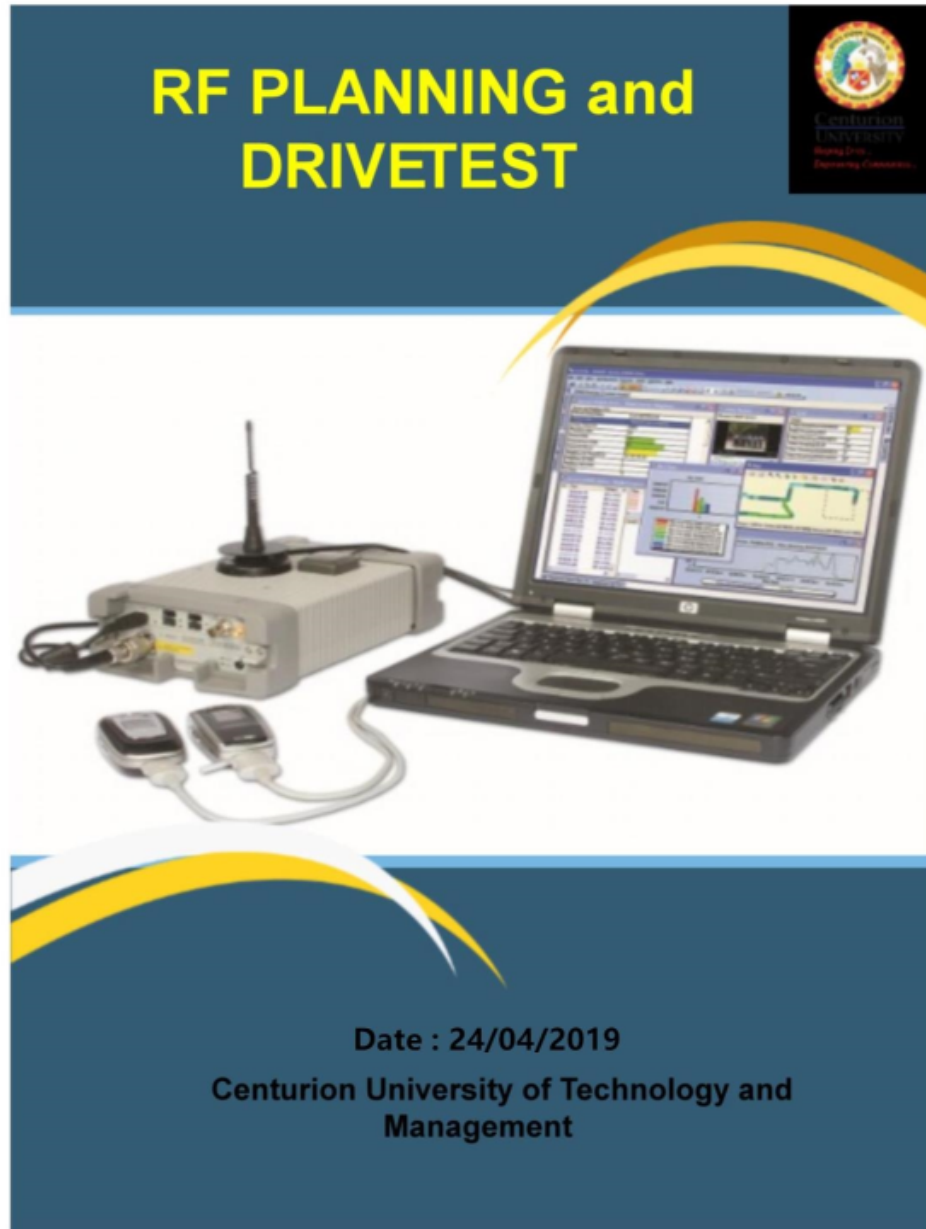


## 17. RF PLANNING & DRIVE TEST

Year:2019

### Event Description:

This RF Planning and Drive Test webinar was organized on the year of 2019 On Various Communication Available and Its Challenges.

The image shows a collection of RF testing equipment. On the left is a grey signal generator or analyzer with a black antenna on top. In the center is a black laptop displaying a software interface with various graphs and data tables. To the right of the laptop are two mobile phones connected to the system via white cables. The entire scene is set against a white background with blue and yellow decorative swooshes. The text 'RF PLANNING and DRIVETEST' is prominently displayed in yellow on a dark blue background at the top. The Centurion University logo is in the top right corner. At the bottom, the date 'Date : 24/04/2019' and the university name 'Centurion University of Technology and Management' are written in white on a dark blue background.

**RF PLANNING and  
DRIVETEST**

**Date : 24/04/2019**  
**Centurion University of Technology and  
Management**



Pre-requisites: Nil  
Course Type : Audit  
(Workshop)  
Duration : 30 Hours

## Course Objectives

- 1. Develop the skills required to design a next generation wireless networks
- 2. To involve the students in the theory and practice of wireless communications



Module	Contents	Duration
Module-1	<ul style="list-style-type: none"><li>• RF Propagation path loss</li><li>• Frequency hopping and Planning</li></ul>	10 hours
Module-2	<ul style="list-style-type: none"><li>• RF Optimization</li><li>• GSM RF Drive Test</li><li>• 3G Optimization</li></ul>	10 hours
Module-3	<ul style="list-style-type: none"><li>• EMF Radiation Calculation and testing</li><li>• 4G Optimization</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

## Learning Outcomes

- 1. Various Communications available and its challenges in modern era

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## 18. DISASTER MANAGEMENT

Year:2019

### Event Description:

This Disaster Management webinar was organized on the year of 2019.It will enhance the skill in digital non-linear post-production.



The poster features a central pink rectangle with the text "DISASTER MANAGEMENT" in bold black letters. Above this rectangle is a dark purple rectangle with the same text in bold yellow letters. The Centurion University logo is in the top right corner. Below the pink rectangle is another dark purple rectangle containing the date "Date : 26/04/2019" and the university's name "Centurion University of Technology and Management".

**DISASTER  
MANAGEMENT**

**DISASTER  
MANAGEMENT**

**Date : 26/04/2019**

**Centurion University of Technology and  
Management**



Centurion  
UNIVERSITY  
Being One...  
Empowering Connections...



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ This course teaches the technical skills and creative principles required for single camera ('film style') video field shooting and production
- ‡ The student will gain experience in planning and shooting Entertainment - and/or information -based video projects
- ‡ The course will provide hands -on skills in audio, video recording technology, composition, lighting and production

### Learning Outcomes:

- ‡ Improve skills in contemporary video technology and operation of cameras, audio, lighting and other television production equipment
- ‡ Achieve critical appreciation for the aesthetics of sound and image production
- ‡ Improve literacy in film and video, including shot composition and projects
- ‡ Develop or improve skills in digital nonlinear post production

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to Camera</li> <li>• Role of a Camera Operator</li> <li>• Camera Settings</li> <li>• Camera Aesthetics</li> <li>• Introduction to Photography Compositions</li> <li>• Multi-camera Set Up</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Dynamics of Videography</li> <li>• Lens Management</li> <li>• Types of Shots</li> <li>• Camera Angles</li> <li>• Camera Movements</li> <li>• Zoom Lenses</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Photography Design</li> <li>• Introduction to Lighting</li> <li>• Basic of light</li> <li>• Every Photographer must know</li> <li>• Use of artificial and natural light for your Photography Camera filters and colour Temperature</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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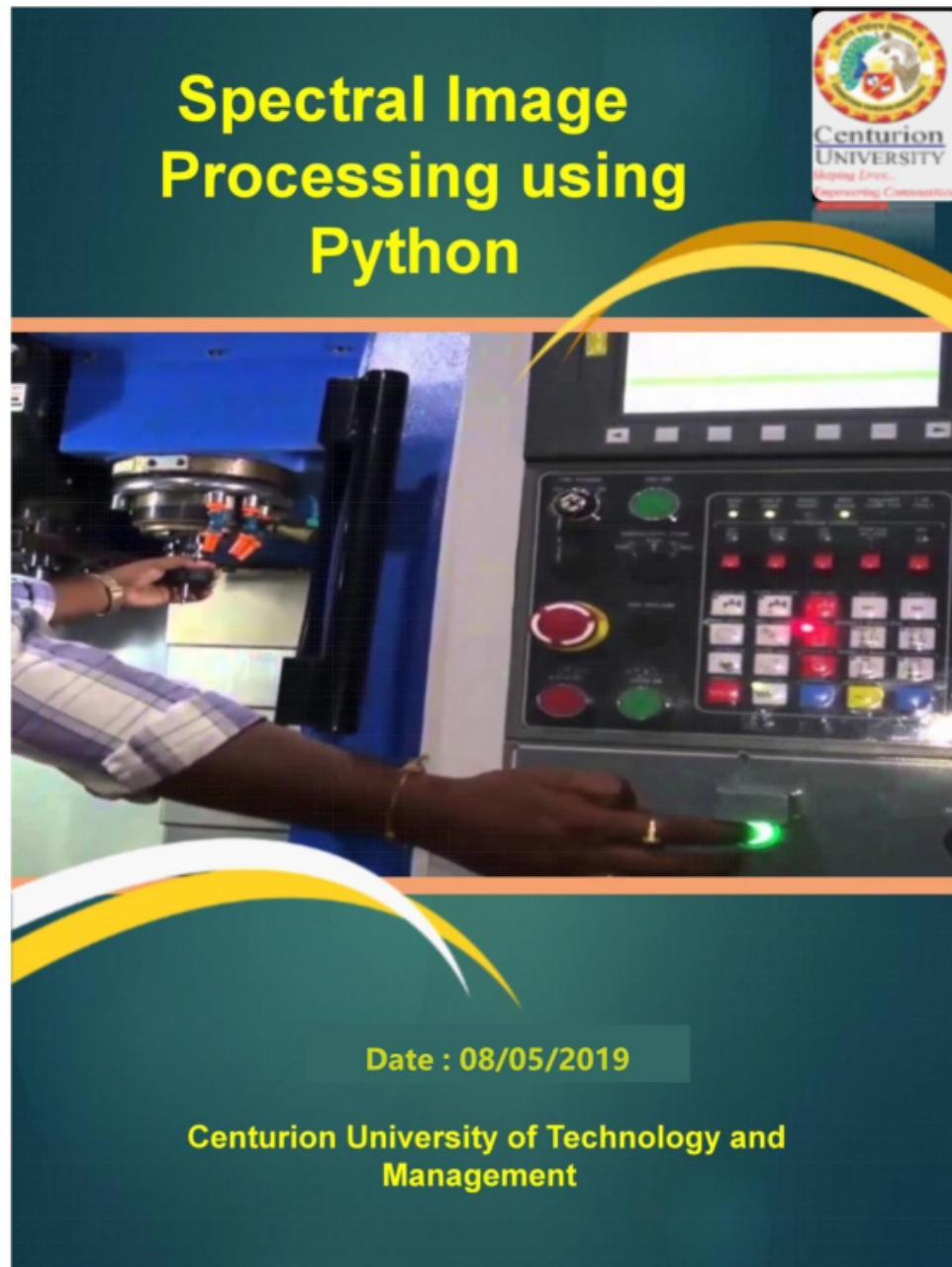


## 19. SPECTRAL IMAGE PROCESSING

Year: 2019

### Event Description:

This Spectral Image Processing using Python webinar was organized on the year of 2019. Gives Brief idea about CNC programming and more.



The poster features a dark teal background with yellow and white decorative swooshes. At the top, the title "Spectral Image Processing using Python" is written in large, bold, yellow font. In the top right corner is the Centurion University logo, which includes a circular emblem with a book and a lamp, and the text "Centurion UNIVERSITY" with the tagline "Empowering Lives... Inspiring Connections". Below the title is a photograph of a person's hands operating a CNC machine's control panel, which has a screen and various buttons. At the bottom, a dark teal box contains the date "Date : 08/05/2019" in yellow text. Below this, the university's name "Centurion University of Technology and Management" is written in yellow text.

**Spectral Image Processing using Python**

Centurion UNIVERSITY  
Empowering Lives... Inspiring Connections

Date : 08/05/2019

Centurion University of Technology and Management





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

**Learning Outcomes:**

- 1 Ability to analyze the drawing to get the stages of product development from the raw material as per the availability of tools and fixtures.
- 2 Ability to optimize the machining time for getting the component / part ready by machining
- 3 Ability to make/ generate part program from the drawing. Program execution in CNC & testing its validation

**Course Objectives:**

- 1 Carry out Preparations for Programming CNC machine for production
- 2 Test and prove the program on the CNC Machine
- 3 Maintain 5S at the work premises & programming the machine for specific tool operations
- 4 Preparation of process plan & optimize the cycle time

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Safety Practice</li> <li>• Practice - Demonstration of Personal safety, Professional safety and machine safety.</li> <li>• Practice - Demonstration of uses of Personal Protective Equipment.</li> <li>• Introduction to CNC technology &amp; programming.</li> <li>• Practice: Demonstration on CNC machine tools ,CNC controller and Types of CNC control</li> <li>• Practice: Demonstration of different parts of different CNC machines.</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Measuring and Quality control.</li> <li>• Practice - Demonstration and practice of using different measuring tools while working on machine.</li> <li>• Practice - Demonstration and practice of different quality checking processes like flatness, angle, go-no go.</li> <li>• Coordinate System &amp; Types of Codes.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• CNC Lathe Part programming.</li> <li>• Practice - Demonstration and practice of different part programming of CNC lathe machining processes like facing, turning, taper turning, thread cutting and knurling.</li> <li>• CNC Milling Part programming .</li> <li>• Practice - Demonstration and practice of different milling machine operations like face milling, end milling, profile milling &amp; pocket milling.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*[Signature]*  
 Convener




## 20 DIGITAL MANUFACTURING USING DALMIA


Year:2019

### Event Description:

This Digital Manufacturing using Dalmia webinar was organized on the year of 2019, it gives idea about software (Dalmia) as well as its uses.



**Digital Manufacturing  
using Dalmia**



Date : 14/05/2019  
Centurion University of Technology and  
Management



### Learning Outcomes:

- 1 Use the Digitized Shape Editor (DSE) workbench
- 2 Import and process the digitized data (scans or clouds of points), Quick Surface Reconstruction (QSR) from the digitized data.
- 3 Create a mesh and extract characteristic curves to create surfaces using point cloud data

Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1 Understand concept of reverse engineering
- 2 Understand principles of imaging, cross-sectional scanning, digital data, computational graphics
- 3 Understand legality of reverse engineering concept

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>• Processing the Point data &amp; Creating Tesselated Mesh</li> <li>• Stages in the Process, Introduction to Digitized shape editor, Importing the Point data, editing the cloud, Creating &amp; Correcting the mesh, editing the mesh, creating tessellated mesh</li> <li>• Practice:2 Cloud Point Generation</li> <li>• Practice :3 Mesh Generation from Cloud Point data</li> <li>• Curve Creation &amp; Processing</li> <li>• Stages in the Process, creating and editing scans, creating curves, Additional tools, Introduction to quick surface reconstruction, creating scans by segmentation, processing curves</li> <li>• Practice : 4 Curve Generation</li> </ul>	30 hours
Module2	<ul style="list-style-type: none"> <li>• Creating Surface</li> <li>• Stages in the Process, creating surface, using automatic processes, checking deviations</li> <li>• Practice :5 Surface Generation &amp; Optimization</li> <li>• Additive Manufacturing Technology in product development-Materials for Additive Manufacturing-Technology,Classification Stereo lithography Apparatus (SLA)Principle, process, advantagesUsed Deposition Modeling-Principle, process, advantages, Selective Laser SinteringPrinciple, Process, advantages, Three Dimensional Printing-Principle, process, advantages, Laser Engineered Net Shaping (LENS)</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• DelmiaAdditive Part Preparation Essentials</li> <li>• Preparing Infrastructure, Preparing Parts, Managing Rules, Generating the Slicing Path,</li> <li>• Practice : 6 Prepare a part for 3D Printing</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*H. Chandra*  
 Convener



*Anita Patra*

**Dr. Anita Patra, Registrar, CUTM**



2017-2018



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Awareness of Trends in Technology (Circulars/Brochures)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

CORPORATE OFFICE  
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OPPOSITE PAL HEIGHTS | BHUBANESWAR |  
KHURDA | ODISHA | INDIA | PIN - 752050

CAMPUS  
BHUBANESWAR | PARLAKHEMUNDI | RAYAGADA |  
BOLANGIR  
WWW.CUTM.AC.IN



S.NO	Events	Participants
1	Wheeler Service Technology	64
2	Product Life Cycle Management	43
3	Drug Research using Biovia	53
4	Drug Design Using Biovia	50
5	Drug Discovery using BIOVIA	50
6	CCTV Technician	50
7	Cyber Security: Linux Administration	85
8	Cyber Security: IT Data Security	90

Anita Patra



**Dr. Anita Patra, Registrar, CUTM**

## 1. 4-wheeler Service Technology

**Event Description:** This 4-Wheeler Service Technology webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.



The image is a promotional graphic for a webinar. It features a dark teal background with yellow and white curved accents. At the top left, the title "4 Wheeler Service Technology" is written in large, bold, yellow font. In the top right corner, there is a circular logo for Centurion University of Technology and Management, which includes a globe and the university's name. Below the title, a photograph shows a white car elevated on a blue hydraulic lift in a workshop. Several people, including students and an instructor, are gathered around the car, looking at its underside. At the bottom of the graphic, a white rectangular box contains the date "10<sup>th</sup> January 2018". Below this box, the text "Centurion University of Technology and Management" is written in white.

# 4 Wheeler Service Technology

Centurion UNIVERSITY  
Shaping Lives... Empowering Communities

10<sup>th</sup> January 2018

Centurion University of Technology and Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Would be able to understand each individual parts working mechanism
- ‡ Able to find out the problems using fault diagnosis method or by scan tool
- ‡ Would be able to guide the technicians for standard operating procedures to resolve fault

### Learning Outcomes:

- ‡ Evaluate the information gathered from the customer report/job card /technician notes
- ‡ Warranty claim and maintenance details and take appropriate action to ensure maximum customer

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Introduction to an Automobile</li> <li>• Practice - Briefly explain BS IV &amp; BS VI model.</li> <li>• Practice - overview Inspection of BS engine and there different parts</li> <li>• Systems of measurement</li> <li>• Practice: Demonstration of Least Count, calculation, care &amp; use of Veneer Caliper, micrometer and dial gauge.</li> <li>• Practice: Demonstration of use of different tools .</li> <li>• Introduction to engine</li> <li>• Practice - Demonstration and Practice of Perform measuring practice to check the flatness of the cylinder head is warped or twisted with straightedge is used with a feeler gauge.</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Diesel Engine Components.</li> <li>• Practice - Demonstration of Perform measuring practice on cylinder bore, Connecting rod bore, inside diameter (ID) of a camshaft bearing with Telescope gauges.</li> <li>• Practice - Demonstration and Practice of major exterior components or parts of the automobile &amp; Layout of an automobile</li> <li>• Piston and connecting rod</li> <li>• Practice - Demonstration and Practice of Checking connecting rod for bend and twist. Assemble the piston and connecting rod assembly.</li> <li>• Construction of a engine</li> <li>• Practice: Demonstration of Perform measuring camshaft journal dia., crank shaft journal dia. , piston diameter by the help of micro meter.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Intake &amp; exhaust systems</li> <li>• Practice: Demonstration and Hands on practice on Execute overhauling of injectors and testing of injector</li> <li>• Diesel Fuel Systems and braking.</li> <li>• Practice: Demonstration and Practice of working and service procedure of ABS and identification of different parts of air brake system and its work principle.</li> <li>• Emission Control:- Vehicle emissions.</li> <li>• Practice: Demonstration and Practice of EGR /SCR Valve Remove and installation for inspection.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



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## 2 Product Life Cycle Management

**Event Description:** Product Life Cycle Management webinar was organized on the year of 2017-18. It Gives idea about Manages the Engineering process generates the reports and more.



# Product Life Cycle Management



16<sup>th</sup>  
February  
2018

Centurion University of Technology and  
Management





**Course Objectives:**

- Use ENOVIA Engineering BOM Management
- Create parts and specifications
- Create Change Orders

**Learning Outcomes:**

- Manage the engineering change process
- Raise Change Requests for the parts and specifications
- Generate various types of reports.

Prerequisites: Nil  
 Course Type : Audit (Worksh  
 Duration : 30 Hours

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Product Lifecycle Management (PLM), Need for PLM, Product Lifecycle Phases, Opportunities of Globalization, Pre - PLM Environment, PLM Paradigm, Importance &amp; Benefits of PLM, Widespread Impact of PLM, Focus and Application</li> <li>• ENOVIA</li> <li>• Getting Started, Working with Parts, Creating &amp; Attaching Specifications</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• EBOM</li> <li>• Creating Engineering Bill of Materials</li> <li>• ECM</li> <li>• Releasing parts using Enterprise Change Management, Reports</li> </ul>	10 hours
Module-3	<ul style="list-style-type: none"> <li>• Collaborative Life Cycle Management</li> <li>• Getting Started, Creating a Product Structure, Managing the Structure</li> <li>• 3D Tolerancing &amp; Annotation</li> <li>• Dimensions &amp; Tolerances , Assembly Specifications, Validate Annotations, Generate Drawings, Review through 3D Play.</li> <li>• Master Project</li> <li>• Master Project on ENOVIA EBOM Management</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



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### 3 Drug Research Using Biovia

**Event Description:** Drug Research using BIOVIA, webinar was organized on the year of 2017-18. By Centurion University of Technology and Management, It Gives idea about prediction of drugs by molecular docking,



The image is a promotional graphic for a webinar. At the top, there is a decorative header with a pink and blue wave pattern. The title "Drug Research using Biovia" is written in a bold, blue, sans-serif font. To the right of the title is the Centurion University logo, which is a circular emblem with a globe and the text "Centurion UNIVERSITY" and "Empowering Generations". Below the title is a photograph of a person in a white lab coat and blue gloves, holding a rack of test tubes. The bottom section of the graphic features a white box with the date "17 March 2018" in green text, and below it, the text "Centurion University of Technology and Management" in a smaller green font. The background of the bottom section is a colorful, abstract wave pattern in shades of pink, purple, and blue.

**Drug Research  
using Biovia**

Centurion  
UNIVERSITY  
Empowering Generations

**17 March 2018**  
Centurion University of Technology and  
Management



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1 To know about the tools of discovery studio Biovia software
- 1 Ligand -protein interaction
- 1 Drug designing

### Learning Outcomes:

- 1 Prediction of drug by molecular docking
- 1 Pharmacophore modelling
- 1 Publication/product

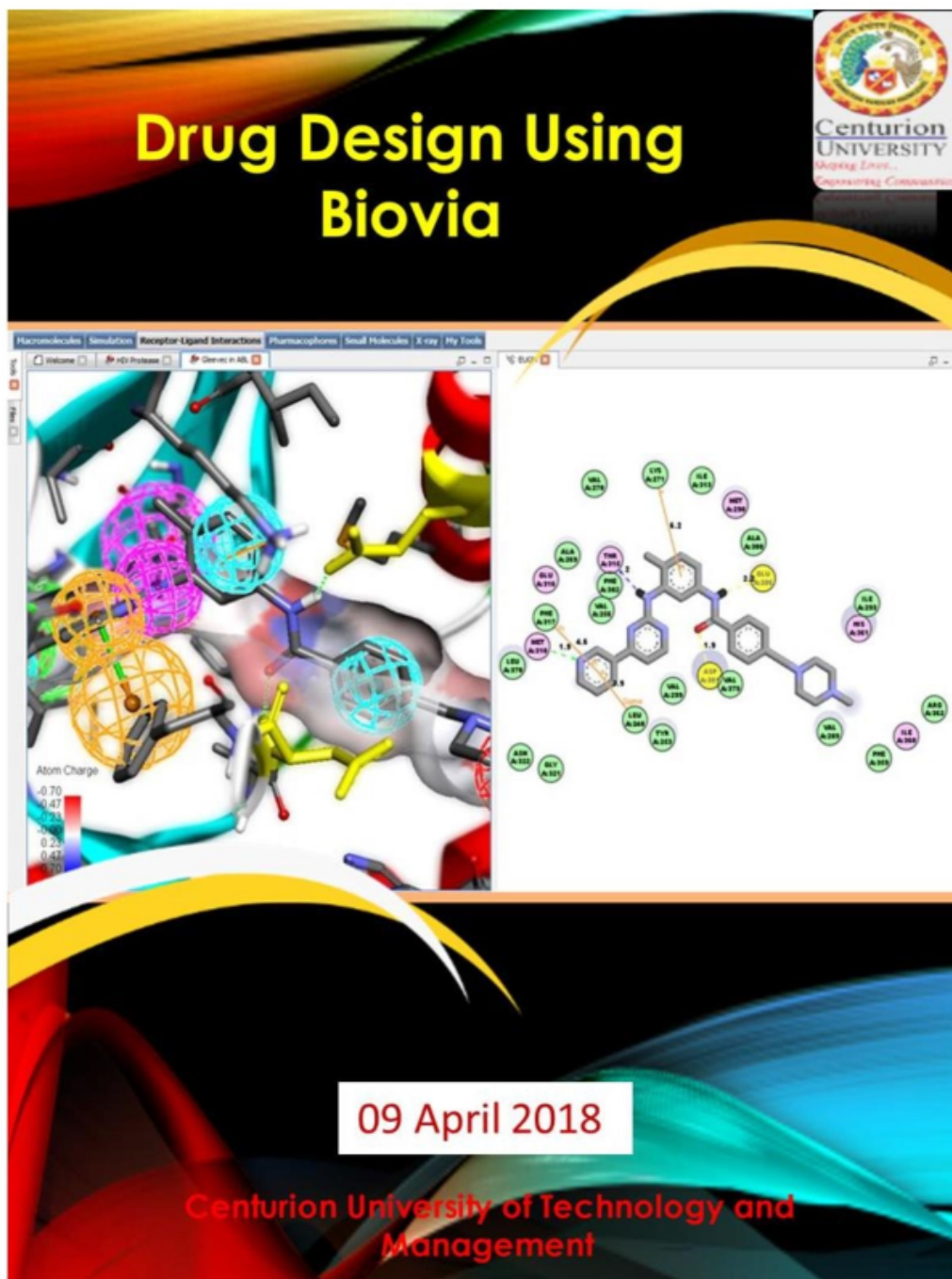
Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Discovery of phytochemicals as potential drug substitute</li> <li>• Practice: Use of discovery studio for drug design</li> <li>• Practice: Phytochemicals present in a particular plant and download its mol file</li> <li>• Practice: Identification of enzyme molecules of a microbe using Brenda enzyme database</li> <li>• Practice: Downloads PDB file of different enzymes</li> <li>• Practice: Study of different parts of an enzyme molecule in a molecular window.</li> <li>• Practice: Ligand -protein molecular docking.</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Identification of pharmacophore (Automatic/Manually)</li> <li>• Practice: Automatic identification of structural feature of a pharmacophore</li> <li>• Practice: Identification of a pharmacophore manually</li> <li>• Practice: ADMET and Toxicity report analysis of a drug molecule.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Functionalization of a molecule and study its potential as a drug</li> <li>• Practice: Forcefield of a protein molecule using simulation.</li> <li>• Identification of a specific phytochemical for a disease.</li> <li>• Identification of a chemical drug based on structural similarity with a phytochemical for a specific disease.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



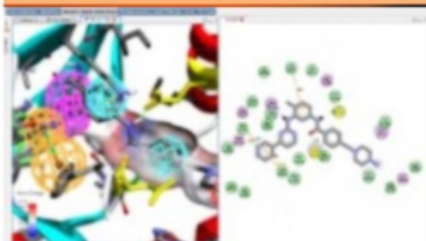
Convener

#### 4 Drug Design Using Biovia

**Event Description:** Drug Design Using Biovia, webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.







Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- † To understand the Molecular Modeling Process used in Drug Discovery.
- † The concept of Structure and Ligand -based Drug Designing.
- † The Molecular Docking processes and their use in drug discovery.
- † The Drug-likeness properties of various chemical entities.
- † The application of Pharmacophore Modeling in drug discovery.
- † To identify potential drug candidates through Virtual Screening of biological compounds.

### Learning Outcomes:

- † Students will understand the Biovia Tools and their application in drug discovery processes.
- † Identify potential biological molecules from synthetic and natural sources by using Biovia.
- † Recognize and comprehend various disease targets and select an ideal target for drug discovery.
- † Design novel drug candidates for various diseases by using Biovia Discovery Studio.
- † Repurpose the already existing drugs for safe and effective medication for various diseases.

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Ligand Structure Handling in Discovery Studio</li> <li>• Introduction to Drug Discovery Processes. Introduction to Biovia Discovery Studio. Ligand sketching using Biovia Discovery Studio. Ligand importing and Handling with Biovia Discovery Studio. Study of Various Chemical and Ligand databases and structure search in the databases. Structure importing from chemical databases and Handling of Large chemical databases.</li> <li>• Practice 1: Create your own Ligand Database using atleast 10 natural product molecules and 10 synthetic compounds from published literature with appropriate references enlisted in a word document file.</li> <li>• Protein Structure Handling in Discovery Studio</li> <li>• Practice 2: Identify a disease protein from plant or animal origin and prepare the suitable protein using biovia .</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Drug Receptor Interaction study in Discovery Studio</li> <li>• Theory of Receptor - Ligand Interaction and Molecular Docking. Molecular Docking using Discovery Studio. Lead Identification through Virtual screening. Structure based virtual screening using Discovery Studio.</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Prediction of Ligand properties and Pharmacophore in Discovery Studio</li> <li>• ADMET Descriptors and their theories. Prediction of ADMET properties of Ligands using Discovery Studio. Introduction to pharmacophore model and their use in drug discovery. Pharmacophore modeling using Discovery Studio (Auto Pharmacophore Generation). Pharmacophore modeling using Discovery Studio (Common Feature Pharmacophore Generation). Pharmacophore modeling using Discovery Studio (3D QSAR Pharmacophore Generation). Virtual screening using Pharmacophore model using Discovery Studio.</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



## 5 Drug Discovery using BIOVIA

**Event Description:** Drug Discovery using BIOVIA, webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.

The poster features a central image of a hand in a blue glove holding a red pill. The background is a blurred image of a person's face. Overlaid on the image are various chemical structures and data tables. The text 'Drug Discovery using BIOVIA' is prominently displayed in green. The Centurion University logo is in the top right corner. The date '19 May 2018' and the university name are at the bottom.

**Drug Discovery using  
BIOVIA**

**Centurion  
UNIVERSITY**  
Rising Lives...  
Empowering Communities.

485-10001/9800  
+10722 14-3411  
172009

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7.98053E-08	3.98E-07	0.201	0.201	0.201
8.00100E-08	3.00E-06	0.51E	0.51E	0.51E
8.40100E-08	2.51E-06	0.71E	0.71E	0.71E
8.80100E-09	8.31E-06	0.81E	0.81E	0.81E
9.00100E-09	1.00E-05	0.90E	0.90E	0.90E
9.40100E-10	2.51E-05	0.92E	0.92E	0.92E
9.80100E-10	6.31E-05	0.93E	0.93E	0.93E
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**19 May 2018**  
**Centurion University of Technology and  
Management**



Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ To learn the tools of BIOVIA in detail,
- ‡ To learn about Drug Designing,
- ‡ To learn about detailed Protein structure, pharmacophore, basics of Docking and Discovery studio and application in Agriculture, Fisheries and others Sciences
- ‡ To learn about the fundamental of Nano Materials and its application in Agriculture, Fisheries and others Sciences

### Learning Outcomes:

- ‡ Products/ Patents/ Publications
- ‡ To be able to design a drug molecule and identify its applications
- ‡ To be able to analyze nanomaterials and use it as Bio -Pesticides and Biofertilizers,
- ‡ To be able to design a drug molecule and identify its applications.
- ‡ To be able to illustrate the structure of Protein, Pharmacophores and also able to handle Discovery Studio completely

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Protein-Based Modelling, Fragment Builder, pharmacophore features, Basics of Pharmacophores , Basis of Chemical Structure in Pharmacophore, Chemical viability analysis of Pharmacophores, conformation models for use in pharmacophore modeling</li> <li>• Generate pharmacophores from proteins, Generate pharmacophores from ligands, Receptor -based pharmacophore, Fit and Map ligands against a pharmacophore, Search databases using pharmacophores</li> <li>• Pharmacophore Comparison, Ligand Pharmacophore Mapping, Application in Biopesticides, Application in Biofertilizer</li> <li>• Protein preparation steps and algorithms. Protein preparation using Discovery Studio.</li> <li>• Practice 2: Identify a disease protein from plant or animal origin and prepare the suitable protein using biovia .</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• Fundamental of metals and nonmetal use in Agriculture, Fisheries and Sciences, Uses and applications of Macroelements , Uses and applications of Microelements</li> <li>• System Build and Sketch, Crystal Building, Crystal Morphology, Characterization of Crystal, Crystal visualization &amp; properties, Analysis of Surfaces &amp; Interfaces</li> <li>• Blending, Formulation of poorly water -soluble drugs into crystalline nano -suspension, Develop a molecular modeling approach to rapid surfactant screening, stabilizing surfactant systems for a particular drug, based on its crystal structure</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Drug Discovery - Issues, Target and Lead Identification, Drug And Databases, Drug Properties, Drug Solubility/permeability</li> <li>• ADME, Molecular Modelling, Quantitative Structure -Activity Relationship, Target -based drug design, Docking</li> <li>• Pharmacokinetics/pharmacodynamics, Discussion on Molecular Drug Designing, Targeted drug designing, Application</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

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## 6 CCTV Technician

**Event Description:** This CCTV Technician webinar was organized on the year of 2017-18. By Centurion University of Technology and Management.



The image is a promotional graphic for a webinar. It features a blue background with a central photograph of a person in a grey shirt and blue cap working on a white CCTV camera. The camera is mounted on a wall, and the person is adjusting it. The text 'CCTV Technician' is written in large yellow letters at the top. The Centurion University logo is in the top right corner. The date '25th May 2018' is in a white box at the bottom, and the university's name is at the very bottom.

**CCTV Technician**

Centurion  
UNIVERSITY  
*Shaping Lives...  
Empowering Communities.*

25<sup>th</sup> May 2018

Centurion University of Technology and  
Management





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- 1. Familiarization with the work environment and challenges for an CCTV technician
- 2. Familiarization to the principles, materials, components, and tools required
- 3. Develop an end-to-end technical understanding to execute CCTV installation
- 4. Complying to the CCTV installation specifications, guidelines and safety standards during work

### Learning Outcomes:

- 1. Identify the role and responsibilities of CCTV technician
- 2. Implement the knowledge of the basics of electronics components used in DVR and camera
- 3. Use wiring skills as per the wiring diagram
- 4. Concept about installation of CCTV .
- 5. Illustrate how to work efficiently with superiors and colleagues
- 6. Comply with the safety procedures and standards to be followed while working

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> <li>• Basics of security surveillance</li> <li>• Big picture about the latest trend on the CCTV , Its importance in todays life and future scope</li> <li>• Explain the facts of video surveillance.</li> <li>• Practice Explain and construct various nodes of CCTV surveillance system</li> <li>• Functions of video surveillance system</li> <li>• Overview of the components used in the CCTV , detail construction of the camera and the detail construction of the DVR, Constructing of a video surveillance system.</li> <li>• Explain function of blocks and equipment required to implement a video surveillance system.</li> </ul>	10 hours
Module2	<ul style="list-style-type: none"> <li>• Classification of the lens and the image sensor , its working and specification, Different types of lens and their utility.</li> <li>• Practice Differentiate &amp; select the best camera from the same group depending on the image quality being measured by TVL chart.</li> <li>• Practice Selecting a camera for higher security application</li> <li>• Project-Phase 1 (10hrs)</li> <li>• Customer Requirement, Bill of Materials (BoM), purchase order (PO) and Procurement</li> <li>• DVR</li> <li>• Overview of the DVR its parts data cables , basic classification of the DVR board and connecting terminals. DVRs interface to view and record the image transmitted by a camera.</li> <li>• Practice The function of various blocks of DVR.</li> </ul>	10 hours
Module3	<ul style="list-style-type: none"> <li>• Overview of the software, different feature of the software and the setting of the software for the back up and monitoring system.</li> <li>• Practice To install the appropriate software for IP network or remote monitoring</li> <li>• Practice To enter the appropriate IP address to receive the video signals through IP network / internet</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

*Sheela C*



Convener

## 7 Cyber Security Linux Administration

**Event Description:** Cyber Security Linux Administration webinar was organized on the year of 2017-18. It Gives Idea about Different Cyber-attacks and Linux Administration

# Cyber Security Linux Administration



06 June 2018

**Centurion University of Technology and Management**



Pre-requisites: Nil  
Course Type : Audit (Workshop)  
Duration : 30 Hours

### Course Objectives:

- 1 Develop skills to manage a Linux server and provide basic security to the server
- 1 Master hacking methodology to be used in penetration testing

### Learning Outcomes:

- 1 Able to setup Linux server
- 1 Able to do client and server side configuration of different services
- 1 Able to provide security to the server


Module	Contents	Duration
Module-1	<ul style="list-style-type: none"><li>• Access the command line, Recover of the root user password</li><li>• Managing files from the command line</li><li>• Creating, Viewing, and Editing Text Files</li></ul>	10 hours
Module-2	<ul style="list-style-type: none"><li>• Managing Local Linux Users and Groups</li><li>• Linux File System Permissions</li><li>• Monitoring and Managing Linux Processes</li></ul>	10 hours
Module-3	<ul style="list-style-type: none"><li>• Archiving and Copying Files Between Systems</li><li>• Installing and Updating Software Packages</li><li>• Accessing Linux File Systems</li></ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>



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## 8 Cyber Security IT Data Security

**Event Description:** This Cyber Security IT Data Security webinar was organized on the year of 2017-18. It Gives Idea about Different Cyber attacks and its vulnerability.



The slide features a dark red background. At the top left, the title "Cyber Security IT Data Security" is written in large, bold, yellow font. In the top right corner, there is a circular logo for Centurion University with the text "Centurion UNIVERSITY" and "Shaping Lives... Empowering Communities" below it. The central part of the slide is a graphic with a glowing blue fingerprint in the center, surrounded by binary code (0s and 1s) and some faint, illegible text. At the bottom, there is a white rectangular box containing the date "20 June 2018". Below the box, the text "Centurion University of Technology and Management" is written in white.

**Cyber Security  
IT Data Security**

Centurion  
UNIVERSITY  
Shaping Lives...  
Empowering Communities

20 June 2018

Centurion University of Technology and  
Management





Pre-requisites: Nil  
 Course Type : Audit (Workshop)  
 Duration : 30 Hours

### Course Objectives:

- ‡ Identify points of vulnerability in system and networks
- ‡ To train students in the organizing and the technical realization and security of data

### Learning Outcomes:

- ‡ Perform different type of attack and find the vulnerabilities
- ‡ Identify some of the factors driving the need for network security
- ‡ Describe the ways in which the security of an information system can be endangered

Module	Contents	Duration
Module -1	<ul style="list-style-type: none"> <li>• Data security – background, Data security – a need, Data security – its importance</li> <li>• Factors for implementing a robust data security, Data security processes, Data security threats</li> </ul>	10 hours
Module -2	<ul style="list-style-type: none"> <li>• More Network based Threat types, Cryptographic Threats, Threats to database security, Banking frauds</li> <li>• Threats to web - application, Physical security threats, Hacking and social engineering</li> </ul>	10 hours
Module -3	<ul style="list-style-type: none"> <li>• Threats in Current technological environment, Data security -benefits.</li> <li>• Threat techniques - an introduction, Malware threat techniques, Network based threat techniques –botnet</li> </ul>	10 hours
<b>TOTAL</b>		<b>30 hours</b>

Anita Patra



Dr. Anita Patra, Registrar, CUTM

*[Signature]*



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