

SAMBALPUR UNIVERSITY: The Sambalpur University was established by the Act of Orissa Legislature on 10th December, 1966 to fulfill long cherished dream of the people of Western Orissa and it is located in picturesque campus named Jyoti Vihar at Burla, just 3 km from the Hirakud Dam. University at Jyoti Vihar provides Post-Graduate education in Twenty-seven subjects through Twenty Post-Graduate Departments. In addition, it provides One-Year P.G. Diploma Course in Computer Science & Application and Diploma Course in Sambalpuri Studies, Three-Year course in M.C.A, Executive M.B.A and Two-Year professional courses in Bio-Informatics, Bio-technology, M.Tech. in Environmental Science, M.Sc. in Electronics and M.Tech. in Computer Science. There are Ten Post-Graduate Hostels in the University Campus out of which four are Ladies Hostels. Besides there are two Nationalized Banks, one Post-Office, one Health Centre, one Auditorium and one multi-purpose gymnasium for providing modern services and amenities to students, teachers and staffs. The university is fully networked and providing round the clock internet facility to all its members through OFC backbone and wi-fi in Hostels. It is connected to UGC Inlibnet through Ernet grid. Under the dynamic and visionary leadership of the **Vice-Chancellor Prof. Arun K Pujari (former Professor of Computer Science, University of Hyderabad)**, the University is poised to grow to new heights in providing quality higher education to the youths to meet the challenges of contemporary world.

Department of Computer Science: The vision of the department is to emerge as an institute of excellence for IT pedagogy and internationally renowned R and D institute and excel in software consultancy. The missions of the Department are

- To offer PG Programmes in Computer Science and IT related areas, keeping in tune with the latest developments and industry requirements.
- To offer advanced level training programme and to promote industry based internships, leading to the development of skilled technical man power in Software Engineering.
- To guide and supervise in the identified IT domains to enhance students' R&D potential.



**Sambalpur University, Jyoti Vihar, Burla
Orissa -768019**

**LOCAL ACADEMY
for
CISCO Certified Network Associate Programme**



Conducted by

**DEPARTMENT OF COMPUTER SCIENCES
Sambalpur University, Jyoti Vihar, Burla
Orissa, India -768019**

www.suniv.ac.in
www.sambalpuruniversitypgc.in



**CISCO NETWORKING ACADEMY
www.cisco.netacad.net**

Local Academy and Training Programme Highlights

- Authorized training centre for Cisco CCNA.
- Highly recognized certification by IT industry world for networking related software professionals.
- Certificate of course completion stating the competencies gained through the curriculum.
- 280 hours of curriculum for Students.
- Exclusive Networking lab with Cisco Manageable SWITCHES and ROUTERS.
- Hands on experience in real life WAN environment.
- Experienced Cisco Certified Academy Instructors (CCAI).
- Guest Faculty from Industries.
- Courseware will be issued free of cost.

THE CURRICULUM (CCNA – Exploration)

The Networking Associate curriculum centers on teaching students to design, build and maintain computer networks. The program prepares students for the 21st Century workplace. The topics covered in the curriculum are also useful for maintaining non-Cisco networks. As much as possible, this is a vendor-neutral curriculum. While Cisco equipment is used to practice and reinforce certain concepts, students gain broad knowledge in the operation of networks, the difference between various types of networking products, how to design and troubleshoot networks and other general topics.

ELIGIBILITY

+2 pass students and above in any discipline having basic computer knowledge

TIMING

Morning 8:00 A.M. to 12:00 Noon / Evening 3:00 P.M. to 7:00 P.M.

COURSE FEE

Rs.10,000/- per outside candidates and Rs 6000/ for the current regular students/staffs of Jyoti Vihar Campus. Rs 20,000/ for industry sponsored candidates.

EXAMINATIONS

- Chapter wise on line examination through the CISCO Academy Server
- Module wise on line examination through the CISCO Academy Server
- Practical skill test for each module
- Final CCNA examination at any authorized Prometric/ Vue test Centers

INFRASTRUCTURE

- A dedicated computer lab with C2D Pentium IV Systems at 1:1 user
- Cisco 2800 series Routers, Cisco 2960 series Switches
- Limited number of Hostel Accommodations may be provided

For further details please contact Cisco Academy at Department of Computer Science, Sambalpur University, Jyoti Vihar, Burla -768019 .

Contact persons:

Dr. S.N. Nayak,
Co-ordinator, CCNA Programme
Legal Main Contact (LMC) – Local Academy,
snayak.su@gmail.com

SYLLABUS (CCNA – Exploration)

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| <ul style="list-style-type: none"> • Network Fundamentals • Use network protocol models to explain the layers of communications in data networks. • Designs calculate and apply subnet masks and addresses. • Build a simple Ethernet network using routers and switches. • Employ basic cabling and network designs to connect devices. • Use Cisco CLI commands to perform basic router and switch configuration and verification. • Analyze the operations and feature of the transport and network layer protocols and services. | <ul style="list-style-type: none"> • Routing Protocols and Concepts • Configure and verify router interfaces. • Demonstrate comprehensive RIPv1 configuration skills. • Design and implement a classless IP addressing scheme for a network. • Use advanced configuration commands with routers implementing EIGRP. • Apply the basic RIPv2 configuration commands and evaluate RIPv2 classless routing updates. • Identify the characteristics of distance vector routing protocols. |
| <ul style="list-style-type: none"> • LAN Switching and Wireless • Troubleshoot common network problems at Layers 1,2,3 and 7 using a layered model approach. • Interpret network diagrams • Perform and verify initial switch configuration tasks including remote access management. • Configure verify and troubleshoot VLANs, inter VLAN routing VTP trunking on Cisco switches and RSTP operation. • Manage IOS configuration files. • Identify the basic parameters to configure a wireless network and common implementation issues. | <ul style="list-style-type: none"> • Accessing the WAN • Describe the impact of applications (Voice Over IP and Video Over IP) on a network. • Configure verify and troubleshoot DHCP and DNS operation on a router. • Verify monitor and troubleshoot ACLs in a network environment. • Configure and verify a basic WAN serial connection a PPP connection between Cisco routers and Frame Relay. • Configure and verify a PPP connection between Cisco routers and Frame Relay on Cisco routers. • Troubleshoot WAN implementation issues. |