

## AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)

Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113



*Certificate Course  
on*

### **CCNA R&S: SCALING NETWORKS COURSE**

*From 16<sup>th</sup> August 2019 to 23<sup>rd</sup> August 2019*



### **ORGANIZED BY**

**DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING  
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,  
TAMARAM (V), MAKAVARAPALEM (M),  
VISAKHAPATNAM-531113**

## AVANTHI EDUCATIONAL SOCIETY

Avanthi Educational Society under the Leadership of Sri M. Srinivasa Rao garu as chairman was started in the Year 1991. Within a short span of its establishment, the group has made a remarkable stride in the field of education offering various courses at Under Graduate, Post Graduate, Pharmacy & Engineering levels. This milestone is achieved as the institution carved itself to impart quality and career oriented education, countering the challenges of the modern world through planning, dedication, determination, prompt execution and with the innovative ideas of our advisory board.

Today, Avanthi Educational Society is proud to have a strength of over 16000 students with 15 institutions under its ambit. It is the path of glory towards the success during the last 19 years. The institution has been adjudged many times as the second best educational institutions in the twin cities and 16th best in all over India through the impartial survey made by the renowned magazine "India Today".

## AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

## **DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

The ECE Department was established in the year 1999 with an intake of 60 students and this was increased to 120 students in the 2007 and increased to 180 students in the 2012. The department has an eminent faculty and well supported infrastructure and laboratories. The faculty keeps abreast with the latest advances in technology and ensures that hardware equipment and related software are upgraded to ensure its students are able to keep pace with current trends in technology and the industry.

The department also offers a Post – Graduate courses in DECS and VLSI Design. The students are encouraged to participate in workshops, industrial internship, industrial visits and seminars; along with the projects assigned during the course, these activities enable them to broaden their outlook and build in professionalism that makes their transition from college to industry smoother after graduation.

## **ABOUT COURSE**

Cisco Certified Network Associate (CCNA) Routing and Switching is a certification program for entry-level network engineers that helps maximize your investment in foundational networking knowledge and increase the value of your employer's network. The CCNA Routing and Switching validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks.

## **TOPICS TO BE COVERED**

- **Day-1:** Describe the operations and benefits of virtual private networks (VPNs) and tunnelling
- **Day-2:** Describe different WAN technologies and their benefits
- **Day-3:** Configure and troubleshoot serial connections
- **Day-4:** Configure and troubleshoot broadband connections
- **Day-5:** Configure and troubleshoot IPSec Tunneling operations
- **Day-6:** Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow
- **Day-7:** Design network architectures for borderless networks, data centers, and collaboration
  - For Registration please contact Mr S.Phani Vara Prasad, Assistant Professor, ECE

<p><b>CHIEF PATRON</b> Smt.M.Gnaneswari President, Avanthi Educational Society</p>	<p><b>PATRON</b> Dr. C P V N J Mohan Rao Principal, Avanthi Institute Of Engineering And Technology</p>	<p><b>CHAIRMAN</b> Sri. E. Govinda Head of the Department Electronics and Communication Engineering</p>
--	---	---



## AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CIRCULAR

Date:14/08/2019

This is for informed to all the III B.Tech ECE students that our department is planning to conduct one week course on "CCNA R&S: Scaling Networks Course In collaboration with CISCO" scheduled from 16-08-2019 to 23-08-2019. It is directed to all the students of III ECE to utilize this opportunity to enhance your technical skills. For more details about registration process and participation contact Course Coordinator Mr Phani Vara Prasad, Assistant Professor, ECE

#### Resource Person Details:

Dr RAVI GOUTHAM

APSSDC

  
E. Govinda

Head of the Department,  
ECE

Copy to: Principal, AIET

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
Avanathi Institute of Engg.&Tech.  
Makavarapalem, Visakhapatnam Dist-531 113.



# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

## CCNA R&S : *Scaling networks course*

From 16/8/2019 to 23/08/2019

### SYLLABUS

**Chapter-1:** Describe the operations and benefits of virtual private networks (VPNs) and tunnelling

**Chapter-2:** describe different WAN technologies and their benefits

**Chapter-3:** Configure and troubleshoot serial connections

**Chapter-4:** Configure and troubleshoot broadband connections

**Chapter-5:** Configure and troubleshoot IPSec tunneling operations

**Chapter-6:** Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow

**Chapter-7:** Design network architectures for borderless networks, data centers, and collaboration

E. Govinda  
CHAIRMAN  
&

Head of the Department  
Electronics and communication Engineering

S. Phani Vara Prasad,  
Asst. Professor

Coordinator

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
Avanthi Institute of Engg. & Tech.  
Makavarapalem, Visakhapatnam Dist-531113.



# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

## CCNA R&S : Scaling networks course

From 16<sup>th</sup> August 2019 to 23<sup>rd</sup> August 2019

### Schedule

#### Day-1 (16/08/2019)

09:00 to 10:00	Inaugural Session
10:00 to 12:00	Describe the operations of virtual private networks (VPNs) and tunnelling
12:00 to 01:00	Lunch Break
01:00 to 04:00	benefits of virtual private networks (VPNs) and tunnelling

#### Day-2 (17/08/2019)

09:00 to 12:00	describe different WAN technologies and their benefits
12:00 to 01:00	Lunch Break
01:00 to 04:00	WAN benefits

#### Day-3(19/08/2019)

09:00 to 12:00	Configure serial connectionsOSI
12:00 to 01:00	Lunch Break
01:00 to 04:00	troubleshoot serial connectionsOSI

#### Day-4(20/08/2019)

09:00 to 12:00	Configure broadband connections
12:00 to 01:00	Lunch Break
01:00 to 04:00	troubleshoot broadband connections

Day-5(21/08/2019)

09:00 to 12:00	Explain how switching operates in a small to medium-sized business network
12:00 to 01:00	Lunch Break
01:00 to 04:00	Explain how switching operates in a small to medium-sized business network

Day-6(22/08/2019)

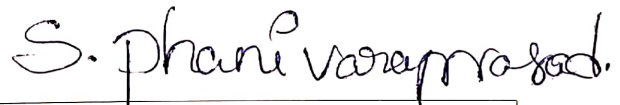
09:00 to 12:00	Monitor and troubleshoot network operations using syslog
12:00 to 01:00	Lunch Break
01:00 to 04:00	SNMP, and NetFlow

Day-7(23/08/2019)

09:00 to 12:00	Design network architectures for borderless networks
12:00 to 01:00	Lunch Break
01:00 to 04:00	data centers, and collaboration



E. Govinda  
CHAIRMAN  
&  
Head of the Department  
Electronics and Communication  
Engineering



S. Phani vara prasad  
Asst. Professor

Coordinator

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
Avanthi Institute of Engg.&Tech.  
Makavarapalem, Visakhapatnam Dist-53- 113.



# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
Accredited by NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)

Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

## CCNA R&S : Scaling networks course

From 16<sup>th</sup> August 2019 to 23<sup>rd</sup> August 2019

### BTECH ECE STUDENT ATTENDANCE LIST

S.No	Regd. No	Name of Students	16/8	17/8	19/8	20/8	21/8	22/8	23/8
1	17811A0401	ADARI UMA MAHESH	✓	✓	✓	✓	✓	✓	✓
2	17811A0402	AKKENA SOMASEKHAR	✓	✓	✓	✓	✓	✓	✓
3	17811A0404	AMALAKANTI BHARGAV NAVEEN	✓	✓	✓	✓	✓	✓	✓
4	17811A0405	AMIREDDI SIVAJI	✓	✓	✓	✓	✓	✓	✓
5	17811A0406	ANGINA VAMSI	✓	✓	✓	✓	✓	✓	✓
6	17811A0408	BALIREDDI PREM KUMAR	✓	✓	✓	✓	✓	✓	✓
7	17811A0409	BOBBILI ANUVARA	✓	✓	✓	✓	✓	✓	✓
8	17811A0410	BODDU SWAMI NAIDU	✓	✓	✓	✓	✗	✓	✓
9	17811A0411	BOMMALI REVATHI	✓	✓	✓	✓	✓	✓	✓
10	17811A0413	DODDI RAMA KRISHNA	✓	✓	✓	✓	✓	✓	✓
11	17811A0414	DUBASI TEJA SRUTHI	✓	✓	✓	✓	✓	✓	✓
12	17811A0417	GANANADHAM RAMAKRISHNA TEJA	✓	✓	✓	✓	✓	✓	✓
13	17811A0419	GOLLU GOWRI RAJYALAKSHMI	✓	✓	✓	✓	✓	✓	✓
14	17811A0420	GOLUSU SUSHMANJALI	✓	✓	✓	✓	✓	✓	✓
15	17811A0421	GOPASANA PRUDHVI	✓	✓	✓	✓	✓	✓	✓
16	17811A0423	INDALA POOJITHA	✓	✓	✓	✓	✓	✓	✓
17	17811A0424	JANAPAREDDY TIRUMALA	✓	✓	✓	✓	✓	✓	✓
18	17811A0426	KOLLATI NAVYA	✓	✓	✓	✓	✓	✓	✓
19	17811A0427	KONATHALA HARISH BABU	✓	✓	✓	✓	✓	✓	✓
20	17811A0431	LOMBORI KRUPA RANI	✓	✓	✓	✓	✓	✓	✓
21	17811A0432	MALLA RUPA JAGADEESHA	✓	✓	✓	✗	✓	✓	✓
22	17811A0435	NADELLA AJAY KUMAR	✓	✓	✓	✓	✓	✓	✓
23	17811A0436	PALAKA SASIPRIYA	✓	✓	✓	✓	✓	✓	✓
24	17811A0437	PALLA ARUNA JYOTHI	✓	✓	✓	✓	✓	✓	✓
25	17811A0438	PENTAKOTA SRAVANI	✓	✓	✓	✓	✓	✓	✓
26	17811A0440	RAMISETTY MANOJ KUMAR	✓	✓	✓	✓	✓	✓	✓
27	17811A0441	REDDY ANAND KUMAR	✓	✓	✓	✓	✓	✓	✓
28	17811A0442	ROKKAM SAI RATNA DEEPIKA	✓	✓	✓	✓	✓	✓	✓
29	17811A0443	RONGALA RAMA KRISHNA	✓	✗	✓	✓	✓	✓	✓
30	17811A0445	SHAIK SHAHINA PARVEEN	✓	✓	✓	✓	✓	✓	✓
31	17811A0446	SINGAMPALLI SAI	✓	✓	✓	✓	✓	✓	✓
32	17811A0447	SRISAILAPU NAGASAI	✓	✓	✓	✓	✓	✓	✓
33	18815A0401	BOTSA PRASAD	✓	✓	✓	✓	✓	✓	✓

34	18815A0403	GANUGULA KIRANKUMAR	✓	✓	✓	✓	✓	✓	✓
35	18815A0404	GUNDUMALLA SAI KUMAR	✓	✓	✓	✓	✓	✓	✓
36	18815A0406	KOTHADA SAI KUMAR	✓	✓	✓	✗	✓	✓	✓
37	18815A0407	KURELLA NAGA DURGA VASU	✓	✓	✓	✓	✓	✓	✓
38	18815A0408	LAKKOJU SRI JYOTHI	✓	✓	✓	✓	✓	✓	✓
39	18815A0411	RAJANA RAMBABU	✓	✗	✓	✓	✓	✓	✓
40	18815A0412	SRIKAKULAPU SANTOSHI DIVYA	✓	✓	✓	✓	✓	✓	✓
41	18815A0415	YERRA HEMANTH KUMAR	✓	✓	✓	✓	✓	✓	✓
42	18815A0416	NEMANI NIHARIKA	✓	✓	✓	✓	✓	✓	✓

S. Phani Varaprasad  
Coordinator

SJ  
HOD

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
Avanthi Institute of Engg. & Tech.  
Makavarapalem, Visakhapatnam Dist-53- 113





## AVANTHI INSTITUTE OF ENGINEERING ANTECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-  
531113

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A Course on

***CCNA R&S: SCALING NETWORKS COURSE***

Dated :- 16/08/2019





# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)

Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

**Department of Electronics and Communication Engineering**

Dt: 25/08/2019

## BRIEF REPORT

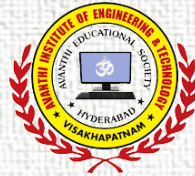
Avanthi Institute of Engineering and Technology had organized a certificate course on "CCNA R&S SCALING NETWORKS COURSE" from 16<sup>th</sup> AUG 2019 to 23<sup>rd</sup> AUG 2019 in the Department of Electronics and Communication Engineering,

We had DR RAVI GOUTHAM, Associate professor, CISCO APSSDC as the speaker to explain each and every detail about scaling network course. He started with portrait of scaling network course, wlan technology, ospf protocol technology, he enhanced interior gate way routing protocol licencing are discussed. He concluded with frame relay and other concepts.

S. Phanivarasod.  
Coordinator

  
Head of the Department

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
Avanthi Institute of Engg. & Tech.  
Makavarapalem, Visakhapatnam Dist-531 113.



# AVANTHI

## INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, accredited by NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-53111

### Certificate of Participation

This is to certify that Mr./Ms. \_\_\_\_\_ of \_\_\_\_\_ has participated in the Certificate Course entitled on CCNA R&S: SCALING NETWORKS COURSE conducted From 16<sup>th</sup> August 2019 to 22<sup>nd</sup> August 2019 was organized by the Department of ELECTRONICS AND COMMUNICATION ENGINEERING at Avanathi Institute of Engineering and Technology.

**Coordinator**

**HOD**

**Principal**