



## ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

Affiliated to JNTUK, Kakinada \* Approved by AICTE, New Delhi \* Accredited by NAAC

Recognized by UGC Under section 2(f) and 12 (B) of UGC Act 1956

ADB ROAD, ADITYA NAGARA, SURAMPALEM-533437

### Department of Information Technology

Date: 30.08.2019.

To  
The principal  
Aditya College of Engineering & Technology  
Surampalem

Respected sir,

[Through Head of the Department]

Sub: Request for your approval to organize a certification course on "CYBER SECURITY ESSENTIALS" – reg.

It's our greatest pleasure to bring to your kind notice that, we the Department of Information Technology would like to train our B.Tech students in the **CYBER SECURITY ESSENTIALS** adapted initially, with the help of our staff; as the present scenario data safety is prior important, understanding and identifying different data security related concepts and work to achieve security. It will be more helpful to the students in theoretical and technical point of view. In this regard we are requesting your permission for further proceedings.

Resource Person : Mr. Shaik Ahmed  
Assistant Professor  
Honorarium : Rs.8000/-

*forwarded to  
The Principal  
Rhe...*

  
Course Coordinator

  
Aditya College of  
Engineering & Technology  
SURAMPALEM- 533 437



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Date: 02.09.2019

### CIRCULAR

All the B.Tech students are here by informed that a one-week program is arranged to enhance the knowledge on **CYBER SECURITY ESSENTIALS**, as per the schedule from 7<sup>th</sup> October, 2019. All interested students can attend the program and utilize the opportunity. The schedule is attached.

Course Coordinator: Mr. B Manikyaala Rao  
+919640380333

**Head of the Department**



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## Department of Information Technology

### CYBER SECURITY ESSENTIALS Syllabus

**Cybersecurity Fundamentals** -critical factors of information assurance, *vulnerability* and *risk*, concepts of cybersecurity risk management, cybersecurity threats to an organization, national and industry standards and regulations that relate to cybersecurity, cyberattack surface of various organizations.

**Computer Networks as a Foundational Element of Cybersecurity**-wired network, wireless networks, networking conceptual models, services and potential vulnerabilities, network types, concept of the Internet as a network of connected systems, Identify networking protocols.

**Cyber Threats and Vulnerabilities**-types of cyber threats, types of current cyber threats, concept of malware and the techniques to guard against it, Identify the perpetrators of different types of malicious hacking, characteristics of vulnerabilities, Identify the prevention of and protections against cyber threats, Identify the cyber risks associated with bring your own device (BYOD) opportunities on computer networks.

**Ethics as it Relates to Cybersecurity**-*cyberbullying*, constitute cyberbullying,

Netiquette relates to cybersecurity, Identify laws applicable to cybersecurity, data Privacy

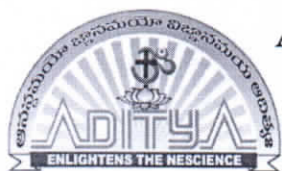
**Securing Operating Systems**-components of an operating system, types of operating systems. desktop and server operating systems, potential vulnerabilities, threats, and common exploits to an operating system, best practices for protecting operating systems, cybersecurity, implications for Current and Emerging Technologies.

  
Course Coordinator

  
Head of the Department

  
PRINCIPAL  
Aditya College of  
Engineering & Technology  
SURAMPALEM- 533 437





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### Department of Information Technology

#### Schedule of CYBER SECURITY ESSENTIALS:

##### Day-1:

- FN Inauguration of the Program and speakers talk about the objectives of the event
- AN Cybersecurity Fundamentals-critical factors of information assurance, *vulnerability* and *risk*, concepts of cybersecurity risk management,

##### Day-2:

- FN cybersecurity threats to an organization, national and industry standards and regulations that relate to cybersecurity, cyberattack surface of various organizations.
- AN Computer Networks as a Foundational Element of Cybersecurity-wired network, wireless networks, networking conceptual models,

##### Day-3:

- FN services and potential vulnerabilities, network types, concept of the Internet as a network of connected systems, Identify networking protocols.
- AN Cyber Threats and Vulnerabilities- types of cyber threats, types of current cyber threats, concept of malware and the techniques to guard against it,

##### Day-4:

- FN Identify the perpetrators of different types of malicious hacking, characteristics of vulnerabilities, Identify the prevention of and protections against cyber threats,
- AN Identify the cyber risks associated with bring your own device (BYOD) opportunities on computer networks.

##### Day-5:

- FN Ethics as it Relates to Cybersecurity- *cyberbullying*, constitute cyberbullying, Netetiquette relates to cybersecurity, Identify laws applicable to cybersecurity, data privacy


AN      Securing Operating Systems- components of an operating system, types of operating systems, desktop and server operating systems, potential vulnerabilities, threats,

Day-6:

FN      common exploits to an operating system, best practices for protecting operating systems, cybersecurity, implications for Current and Emerging Technologies.

AN      Valedictory

  
Course Coordinator

  
Head of the Department

  
PRINCIPAL  
Aditya College of  
Engineering & Technology  
BANGALORE