

**Rajasthan ILD Skills University**  
**B.Voc in Graphic Design**  
Semester - 4<sup>th</sup> semester

**Couse Title : B.Voc in Graphic Design**  
**Semester – Fourth**

S.no	Paper Title	Paper Category Skill Compulsory (SC) Skill Elective (SE)	Credits			Total Credits	Exam Durations (Hrs.)		
			Theory	Practical	Self / Project / Industry		T	P	S
1	Cyber Security Technologies & Practices	SC	4	0	0	4	3		
2	Computer Fundamentals	SC	4	0	0	4	3		
3	Bootstrap Framework	SC	0	0	10	10			2
	Total Credits					18			

**B. Voc. In Graphic Design**  
**Semester - IV**  
**Cyber Security Technologies & Practices**

**Course Name : Cyber Security Technologies & Practices**

**Credits : 6**

**Pre-Requisite : NIL**

**Hours : 84**

**Aim** – The course aims in educating students on the cyber security technologies to help students understand the implications of cybercrime taking into account Indian and global scenario

<b>Units</b>	<b>Course Contents</b>	<b>No. of hours</b>
<b>Unit I</b>	Information security concepts, Overview: Background and current scenario, types of attacks, goals for security, E-commerce security, Computer forensics, steganography Security threats and vulnerabilities, overview of security threats, weak/strong passwords, insecure network connections, malicious code, programming bugs, cybercrime and cyber terrorism.	10
<b>Unit II</b>	information warfare and surveillance, virus, Trojan, worms, botnet, ransomware, shells, backdoors Security management practices, overview of security management, information classification process, security policy, risk management, security procedures and guidelines, business continuity and disaster recovery, ethics and best practices.	34
<b>Unit III</b>	Security laws and standards, security assurance, security laws, intellectual property rights, international standards, security audit.	20
<b>Unit IV</b>	Access control and intrusion detection, overview of identification and authorization, overview of intrusion detection systems, intrusion detection systems and intrusion prevention systems Server management and Firewalls, user management, overview of Firewalls, type of Firewalls Wireless networks and security, components of wireless networks, security issues in wireless.	20

**Learning Outcome:**

**Understanding of cyber safety**

**Assessments**

Assessment 1- from Unit –I- 10%

Assessment 1- from Unit –II- 20%

Assessment 1- from Unit –III- 20%

Assessment 1- from Unit –IV- 25%

**Learning and Teaching Strategy :**

Theory and tests

## Computer Fundamentals

**Course Name :** Computer Fundamentals

**Credits : 4**

**Pre-Requisite : NIL Hours :**

**Aim-** what are computers and the various parts of computer and how to work with computers

Hours:84

Units	Course Contents	No. of hours
<b>Unit I</b>	Introduction to Computer: Definition, Characteristics, Classification of Computers, Analog Computers, Digital Computers, Hybrid Computers, Classifications of computer on the basis of size and speed, different type of computers, generation of computers.	10
<b>Unit II</b>	Computer keyboard, pointing devices, mouse, track ball, touch pad, joystick, touch – sensitive screens, pen – based systems, digitizer, data scanning devices, optical recognition systems, bar code readers, optical mark readers, optical scanners, drum scanners, hand scanner, flatbed scanner, web camera, game pad, digital camera.	15
<b>Unit III</b>	Hard copy devices: Printer, impact printers, daisy wheel, dot matrix printer, line printer, chain printers, comb printers, non-impact printers, DeskJet, inkjet printers, laser printer, thermal transfer printer, barcode printers. Computer Display: CRT, LCD, projection displays, plasma display panel, display standard, monochrome display adapter.	20
<b>Unit IV</b>	Introduction to memory, classifications, random-access memory, volatile memory, non-volatile memory, flash memory, read-only memory, secondary memory, the cache memory, auxiliary storage memory, memory hierarchy, storage devise, magnetic tape, magnetic disk, floppy disk, hard disks, CD, DVD, magneto-optical. Number system, binary, octal, hexadecimal, addition, subtraction, multiplications, computer code: BCD, ASCII, EBCDIC code, Excess-3 code, gray code, software, User interface, system software, programming software, application software logic gates and Boolean algebra representation and simplifications by kMap.	19
<b>Unit V</b>	Computer Viruses: Introduction, history, types of computer viruses, classification of viruses ways to catch a computer virus, symptoms of a computer virus. Application of computer: Desktop publishing, sports, design and manufacturing research and design, military, robotics, planning and management, marketing, medicine and health care, arts, communications, scientific, education. Introduction of internet, history, IP, TCP and UDP, application protocol, world wide web, how the web works, web standards, website, overview, types of websites, electronic mail, internet, e-mail header, saved message file extension, messages and mailboxes, introduction to intranet, uses, advantages, disadvantages.	20

**Learning Outcome:**

Work efficiently and informatively with computers

**Assessments**

Assessment 1- from Unit –I- 10%

Assessment 1- from Unit –II- 20%

Assessment 1- from Unit –III- 20%

Assessment 1- from Unit –IV- 25%

Assessment 1- from Unit –V- 25%

**Learning and Teaching Strategy:**

Practical and theoretical sessions

## Bootstrap Framework

**Course Name : Bootstrap Framework**

**Credits : 4**

**Pre-Requisite : NIL Hours :**

**Aim-** How to develop websites which are made on bootstrap technology and what is bootstrap technology .

hours: 84

Units	Course Contents	No. of hours
Unit I	<b>Bootstrap - Introduction to Bootstrap-</b> What is Bootstrap Framework, Why Bootstrap, History of Bootstrap, Advantages of Bootstrap Framework, What is Responsive web page, How to remove Responsiveness, Major Features of Bootstrap, What is Mobile-First Strategy, Setting up Environment, How to apply Bootstrap to Applications.	10
Unit II	<b>Bootstrap Grid-</b> What is Bootstrap Grid, How to apply Bootstrap Grid, What is Container, Bootstrap Grid, Advantages of Bootstrap Grid, Display responsive Images. Customize Bootstrap's components, less variables, and jQuery plug-in. Bootstrap Typography, use Typography, Bootstrap Tables, Bootstrap Form Layout, and Bootstrap Button. Display images in different styles like Circle shape etc. Display text like muted and warning etc. Carets Classes, hide or show the text in Bootstrap.	24
Unit III	<b>Bootstrap Components-</b> Bootstrap Components, What , Why, Advantages, different types of Bootstrap Components, Glyph icons Component, use Glyph icons Component, Dropdown Menu Component, Button Groups and Button Toolbar, Input Groups Components, Navigation Pills & Tabs Components, Navigation Pills and Tabs Components, Navbar, Breadcrumb Component, Pagination in Application, Badge, Jumbotron. Alerts & Dismissible Alerts, Progress Bar, Media Objects Component.	30
Unit IV	<b>Bootstrap Plug-Ins-</b> What is Bootstrap Plug-Ins, Why, use Bootstrap Plug-Ins, Modal Dialog Box, Methods and Events of Model Dialog Box, Tooltip Plug-in, Carousel Plug-in, font awesome.	20

### Learning Outcome:

Create websites

### Assessments

Assessment 1- from Unit –I- 10%

Assessment 1- from Unit –II- 20%

Assessment 1- from Unit –III- 20%

Assessment 1- from Unit –IV- 25%

### Learning and Teaching Strategy :

Theory and Practical sessions

