

Domains of computer science

Course Code: CSC 11011 Course Title: Introduction to Computer Studies



Dept. of Computer Science
Faculty of Science and Technology

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|---------------------|-------------------------|-----------------|----------|------------------|--|
| Lecturer No: | 5 | Week No: | 5 | Semester: | |
| Lecturer: | <i>Name & email</i> | | | | |

Lecture Outline



- ❖ Different domains of Computer Science
- ❖ Opportunities
- ❖ Chapter-5,6, IT Essentials
- ❖ AIUB Grading structure

Specific Objectives

- ❖ Exploring knowledge and opportunity of different domains of Computer Science.
- ❖ Understanding about AIUB grading structure and calculation.
- ❖ Discussion about Exam Permit policies during and before exam.

Domains

- Data science
- Computer Architecture and High Performance Computing
- Computer Networks and Security
- Databases
- Algorithm Development
- Web Development
- Mobile Development
- IOT

Data Science

- Image Processing – medical diagnosis, image editor
- Machine Learning – e.g Search Engine Result Refining, Product Recommendations, Online Fraud Detection
- Big data handling – e.g weather forecasting, Getting insights from customer reviews
- Artificial Intelligence – e.g Flying Drones, siri, tesla etc
- Deep Learning – e.g. Automated Driving,
- Data Mining-Card fraud detection, medical diagnosis
- Bio-Informatics - Gene therapy, Drug development

High Performance Computing

- Distributed Computing
- Cloud Computing
- Parallel Computing

Computer Networks

- Web Development
- IoT
- Android Development
- Security – steganography , information security etc

Opportunities

- Software Developer
- IT consultant
- Cyber security consultant
- Information systems manager
- Database administrator
- Multimedia programmer
- Systems analyst
- Games developer
- Forensic computer analyst
- Data analyst
- UX designer
- Web designer
- Web developer
- E-Commerce Analyst
- Network Security Engineer
- And many more...

IT Essentials

Chapter 5,6



- The module is available on CISCO account.

Grading Policy



Here is the link where all the detailed Information about grading structure will be found-

Link:

<https://www.aiub.edu/academics/regulations>

| Grading Policy | | |
|-----------------------|----------------|-------------|
| Numerical% | Letter Grade | Grade Point |
| 94-100 | A ⁺ | 4 |
| 90-93.99 | A | 3.75 |
| 86-89.99 | A ⁻ | 3.5 |
| 82-85.99 | B ⁺ | 3.25 |
| 78-81.99 | B | 3 |
| 74-77.99 | B ⁻ | 2.75 |
| 70-73.99 | C ⁺ | 2.5 |
| 66-69.99 | C | 2.25 |
| 62-65.99 | C ⁻ | 2 |
| 58-61.99 | D ⁺ | 1.75 |
| 54-57.99 | D | 1.5 |
| 50-53.99 | D ⁻ | 1 |
| <50 | F | 0 |
| Incomplete | I | |
| Withdrawal | W | |
| Unofficial withdrawal | UW | |

Acti
Go to

Exam Permit Policy



- ✓ A student will not be allowed to seat in the examination without the permit
- ✓ A student will only get his/her permit if all the things(payment, required attendance, etc.) are cleared against the student.
- ✓ Student must collect the permit from the VUES.
- ✓ Student need to bring the permit in every exam. In lost or any other case student can collect temporary permit from the VUES. But in that case condition should be meet up for the eligibility.

References

- I. <https://intellipaat.com/blog/7-big-data-examples-application-of-big-data-in-real-life/>
- II. <https://www.computersciencezone.org/50-highest-paying-jobs-computer-science/>
- III. <https://insights.daffodilsw.com/blog/9-machine-learning-examples-from-day-to-day-life>
- IV. <https://www.iqvis.com/blog/9-powerful-examples-of-artificial-intelligence-in-use-today/>
- V. <https://www.thebalancecareers.com/top-jobs-for-computer-science-majors-2059634>