# International Summer School Manipal University Jaipur [ISSMUJ]-2022

| Project Overview |
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Name of Project: **Cyber Security for Cloud, Fog, and Edge Technologies**

Name of instructor: Prof. Dinesh Kumar Saini
Session: June 2022
Language of instruction: English
Number of contact hours: 36
Credit awarded: 03

**Objective of Project**

- Study of algorithms for Cyber security for cloud technologies.

- Understanding about integration of cyber security in cloud, fog, and edge technologies.

- Modelling of Security and trust in Cloud Systems.

**Syllabus**

- Basics of Cyber Security

- Components of Cyber Security

- Modelling of Cyber Security

- Trust in cloud systems

- Security is moving target

**Organization of Project**

| Total contact hrs 36 | | |
|---|---|---|
| 1st week: | 4 hrs (classes) | 8 hrs (self-study/project) |
| 2nd week: | 4 hrs (classes) | 8 hrs (Mid term exam/assessment/discussion) |
| 3rd week: | 10 hrs (classes/ self-study/ project) | 2 hrs (End term exam) |

**Mode of lectures:** online lecture/online videos/case study/ discussion/ hands-on

**Course Plan**

| Lecture no. | Topic | Lecture mode | Instructor |
|---|---|---|---|
| L: 1-6 | Basics of Cyber Security | online lecture/ online videos | Prof. Dinesh Kumar Saini |
| L: 7-12 | Components of Cyber Security | online lecture/ online videos/ discussion/ hands-on | Prof. Dinesh Kumar Saini |
| L: 13-18 | Modelling of Cyber Security | online lecture/ online videos/ case study | Prof. Dinesh Kumar Saini |
| L: 19-24 | Trust in cloud systems | online lecture/ hands-on/ case study | Prof. Dinesh Kumar Saini |
| L: 25-30 | Security is moving target | online lecture/ hands-on/ case study | Prof. Dinesh Kumar Saini |

**Brief profile of the instructor**



With a vast experience in academics --as a professor, researcher, and administrator—in universities like BITS Pilani, King Saud, university of Queensland, Sohar University, and Now Manipal University Jaipur, with proven record of accomplishment in higher education, Prof. Saini is offering this course as security expert. He is fellow of International Mathematics Association UK(FIMA). He won Emerald Literati Award UK for 2018 for

article, 'Modelling human factors influencing herding during evacuation' published in International Journal of Pervasive Computing and Communications. Besides his academic credentials aptly measured by different quantifiable metrics (e.g. Research gate score 37.12, and Google citation count 1174, H-Index-15, i10 Index 25 and 22 international patents).

**Prof. Saini work can be referred from**

Research Gate Link: https://www.researchgate.net/profile/Dinesh_Saini2
Google Scholar Link: https://scholar.google.com/citations?user=fENsBrAAAAAJ&hl=en
DBLP Link: https://dblp.uni-trier.de/pers/hd/s/Saini:Dinesh_Kumar
Web of Science: https://publons.com/researcher/2953180/dinesh-saini
Semantic Scholar: https://www.semanticscholar.org/author/Dinesh-Kumar-Saini/2979270
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