



VIT-AP
UNIVERSITY

Apply Knowledge. Improve Life!®

Advanced Cryptographic Algorithms and their FPGA Implementations

(A Value Added Course)

offered by
School of Electronics Engineering (SENSE)

The importance of cryptography applied to security in hardware has gained essential relevance during the last few years. Everyday, many users generate and interchange large amount of information in various fields and all these have to work on one or the other kind of hardware. These and other examples of applications deserve a security point of view, not only from a software perspective but also from a hardware perspective. This can be achieved by hardware implementations, i.e. on an FPGA, to achieve better security. In addition to implementing the cryptographic algorithms in hardware, it is necessary to have countermeasures for attacks. Various attacks are employed by intruders to get into our systems and steal sensitive data. The best and most assured way to counter is through implementing the countermeasures in hardware. This course deals with all these methods and implementations in a way that is very easy to understand.



Course Highlights :-

- * Students will be able to understand Cryptographic algorithm concepts and will be able to apply them to counter the attacks on these algorithms.
- * Students will be able to design advanced cryptographic architectures & circuits and implement them on FPGA.
- * Students will be able to design and model various faults & attacks on Cryptographic algorithms using FPGA.
- * Students will be able to design countermeasures for the attacks on FPGA.

EVERY MONDAY 03.00 PM to 05.00 PM
Commence from 21-02-2022.

Certificate after completion of course