CERTIFICATE IN SIGNAL PROCESSING

Those seeking expertise in the areas of signal and image processing should take this program, which offers a wide range of advanced courses in the areas of digital signal processing, data compression, image and speech processing, and pattern recognition.

Curriculum

Code	Title	Credit Hours
Required Courses		**(6)**
ECE 437	Digital Signal Processing I	3
or ECE 569	Digital Signal Processing II	
ECE 565	Computer Vision and Image Processing	3
or ECE 566	Machine and Deep Learning	
Elective Courses		**(6)**
Select a minimum of two courses from the following: [1]		6
ECE 437	Digital Signal Processing I	3
ECE 481	Image Processing	3
ECE 501	Artificial Intelligence and Edge Computing	3
ECE 505	Applied Optimization for Engineers	3
ECE 507	Imaging Theory & Applications	3
ECE 508	Video Communications	3
ECE 510	Internet of Things and Cyber Physical Systems	3
ECE 511	Analysis of Random Signals	3
ECE 528	Application Software Design	3
ECE 563	Artificial Intelligence in Smart Grid	3
ECE 565	Computer Vision and Image Processing	3
ECE 566	Machine and Deep Learning	3
ECE 567	Statistical Signal Processing	3
ECE 568	Digital Speech Processing	3
ECE 569	Digital Signal Processing II	3
ECE 584	VLSI Architecture for Signal Processing and Communication Systems	3
ECE 590	Object-Oriented Programming and Machine Learning	3
Total Credit Hours		**12**

[1] No more than one selection may be a 400-level course.