الرؤيه

يسعى البرنامج الى تخريج مهندسين قادرون على البحث والابتكار في مجال هندسة الاتصالات والحاسبات محليا واقليميا ودوليا مما يساهم في نهوض الصناعة ورفاهية المجتمع.

الرساله

يساهم برنامج هندسة الاتصالات والحاسبات في إعداد خريجين متميزين قادرين على المنافسة والبحث العلمي والتطوير مما يلبى احتياجات سوق العمل محلياً واقليمياً في إطار من القيم المجتمعية والاخلاقية

الاتجاهات البحثية للقسم

التخصص	فرع التخصص	المجالات البحثية
Communication	**Digital Communication**	• Enhancement the resolution of digital images. • Reduce interference in digital subscriber lines. • Digital image processing. • Microwave antenna. • Ultrawide band antenna.
	Mobile Communication	• Channel Estimation • Cognitive Radio • Security in wireless communication • Increase the network speed in transmitting audio and video signals and data.
	Signal Processing	• Image Processing, Speech Processing • Data Compression
	Microprocessors and its Applications	• Advanced microprocessor architectures • Advanced microprocessors and its applications in communication systems.
	Electronic Engineering	• VLSI Design • RF Electronics
Computer	**Artificial Intelligence**	• Machine learning • Natural Language Processing (Arabic based machine understanding and language translation) • Deep learning. • Computer vision.
	Software Engineering	• Service oriented architecture SOA (Systems:

		Optimization, Reliability and Adaptation) • Context-Aware Pervasive Computing • Agent-oriented software abstractions • ERP (Enterprise Resource Planning)
	Computer Networks	• Network operations and management. Network architecture and design • Network flows and Security • Routing algorithms • Network standards and protocols • Next Generation Internet and Related Technologies • Network simulation and emulation • Network coding. • Cyber Security.
	Computer Organization& Architecture	• Computer Architecture • Instruction-Level Parallelism • Memory and Cache Architectures • On-Chip Interconnects • Multi-core and Multithreading • Processor Micro-architectures
	Modeling and Simulation of Engineering Systems	• Modeling and simulation of multi-core architectures • Modeling and simulation of DSP architectures
	Operating Systems	• Multi-Core Operating Systems Kernels • Distributed storage systems • Randomized algorithms • Combinatorial optimization and approximation algorithms • Testing and Verification of Algorithms
	Embedded Systems	• Embedded IOT. • Microcontroller-Based Applications. • FPGA Applications. • IOT Security.
	Power Systems	• Power Electronics. • Power Systems • Techno economic assessment for power systems microgrids. • Renewable energy technologies • Green Hydrogen.

القائم بأعمال رئيس القسم

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