CSIT 510 Object-Oriented Software Development of [3-0-0:3] Enterprise Systems

Discussion of the latest enabling technologies for the development and management of enterprise applications. These technologies include advanced features in objectoriented modeling, software design architecture and information modeling. There will be reading assignments and project presentation.

CSIT 511 Multimedia Application Development [3-0-0:3]

Multimedia fundamentals and design issues. Audio fundamentals and audio processing. Image fundamentals and image processing. Video fundamentals and video processing. Internet Multimedia. Integrated multimedia.

CSIT 520 Introduction to Biometrics [3-0-0:3]

Identification (authentication) of individuals to gain access to classified information and /or secure systems has become an essential part of this modern networked society. This course introduces various biometric technologies.

CSIT 521 Data Mining and Knowledge Discovery [3-0-0:3]

Data mining has recently emerged as a major field of research and applications. Aimed at extracting useful and interesting knowledge from large data repositories such as databases and the Web, data mining integrates techniques from the fields of database, statistics and AI. *Exclusion:* COMP 537

CSIT 530 Advanced Database Systems [3-0-0:3]

This advanced database course addresses a number of selected data management issues and introduces emerging database related techniques.

CSIT 531 Information Retrieval on Internet and Mobile Networks [3-0-0:3] Information retrieval on Internet: client-server and peer-to-peer architectures; data extraction, indexing and search methods: data access and broadcast on wireless

extraction, indexing and search methods; data access and broadcast on wireless networks; design issues, limitations and solutions; location-based services; database issues in pervasive environments.

CSIT 560 Internet Infrastructure: Switches and Routers [3-0-0:3]

The design and analysis of electonic/optical switches/routers needed to support the development and delivery of advanced network services over the Internet. Switches and routers are the KEY building blocks of the Internet.

CSIT 561 Computer Networks: An Internet Perspective [3-0-0:3]

This course discuss in-depth the architectures, protocols, and other key issues in the design of the global Internet. Topics include: common Internet applications, layered network architecture, switching techniques, local area networks, routing, transport, multimedia networking.

CSIT 570 Fundamentals: Theory and Practice [3-0-0:3]

Each module of this course will introduce the appropriate background theory for a specific useful applications. Examples will include lexers, parsers, XML grammar validation, and pattern matching.

CSIT 571 Advanced Cryptography [3-0-0:3]

This course covers a number of topics including: the history of cryptography, design and analysis of ciphers, block ciphers, stream ciphers, public-key cryptography, digital signatures, user and data authentication, nonrepudiation, authentication codes, data integrity, cryptographic protocols and email security.

CSIT 600 Topics in Information Technology [1-3 credit(s)]

State-of-the art topics in Information Technology reflecting recent developments in techniques and tools.

CSIT 690-691 Independent Studies [1-3 credit(s)]

An independent project carried out under the supervision of a faculty member.