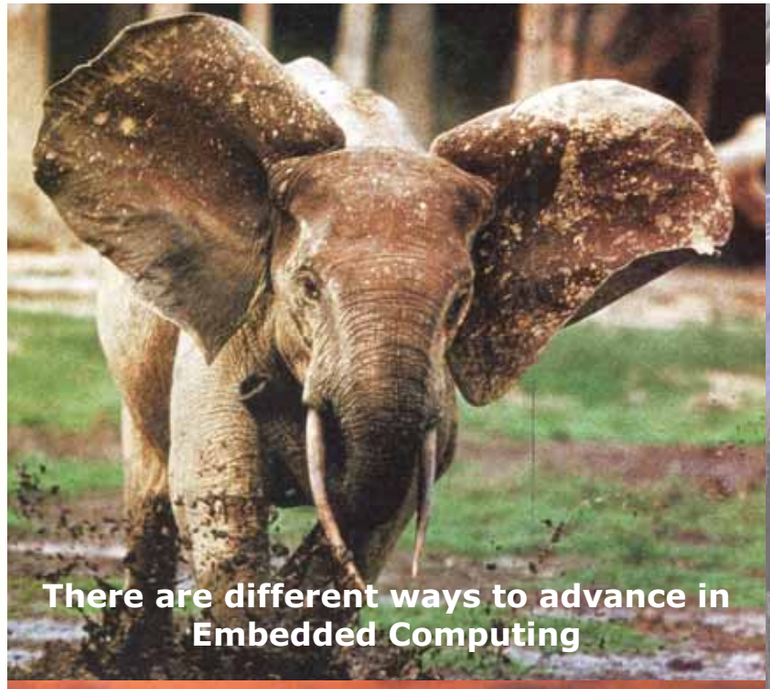
Courses

Embedded computing
Digital design
Hardware platforms
Embedded software
Real-time systems
Algorithms for embedded systems

Embedded systems design
Cognitive systems
Wireless sensor networks
Low-power design
Control theory
Control algorithms
Architectures for software systems I, Carnegie Mellon

Hardware and software co-design
Re-programmable systems
Embedded systems security
Distributed systems and computer communications
Digital signal processing
Dependable systems
Architectures for software systems II, Carnegie Mellon



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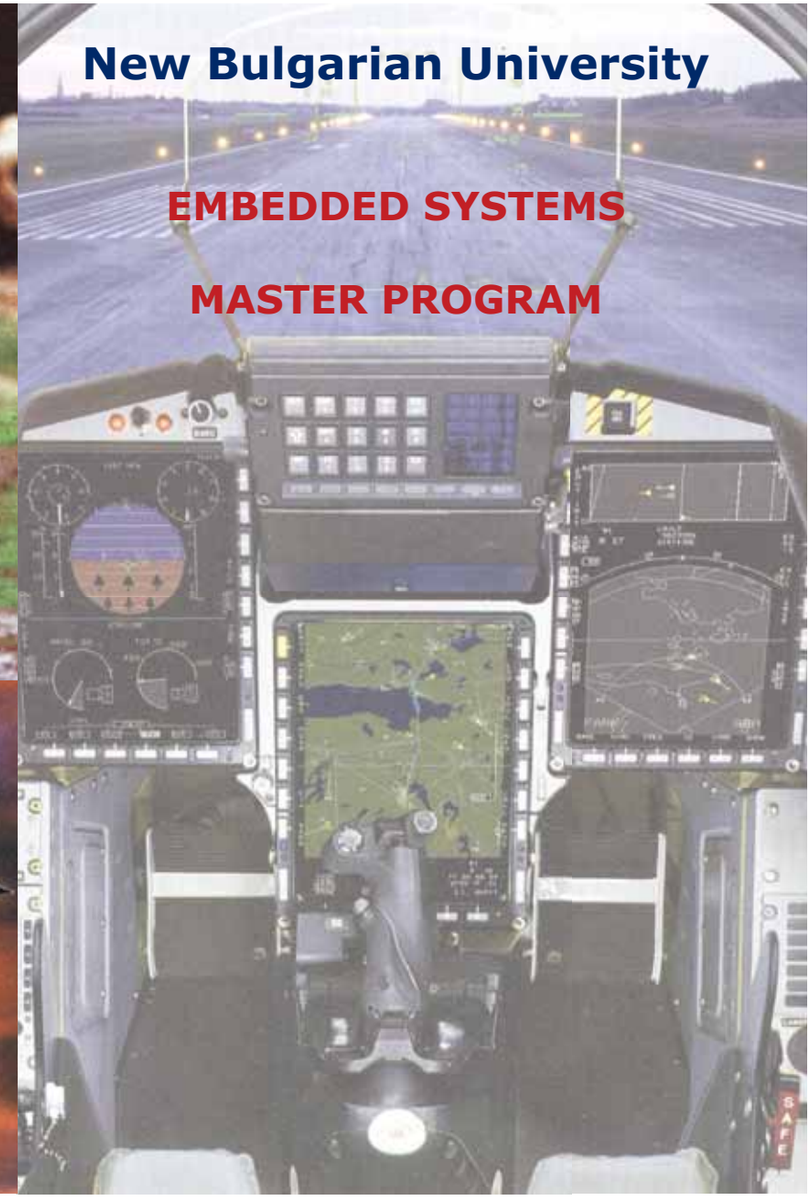

EMBEDDED SYSTEMS

MASTER PROGRAM

Computer Science Department

www.nbu.bg

Embedded systems

An embedded system is a computer within a host device, when the host device, itself, is not generally considered to be a computer. The computers within cars, mobile phones and digital cameras are typical embedded systems. Real-time behavior is the defining characteristic of embedded computers. The timing constrains arise through the two ways that computational process interact with the physical world: reaction to a physical environment and execution on a physical platform. Embedded computers are widely used, with billions sold every year. The embedded systems market size is about 100 times the desktop market.

Application

Applicants must have a Bachelor degree – at least three years of full-time studies. A one-semester introductory module is available for students who lack previous experience in Computer Engineering.

Duration

The typical schedule is spread over two academic years.

Teaching methods

Each semester you select five courses out of seven. Teaching is based on formal lectures, practice with design and development tools and projects.

Official language

English

Diploma

The Master of Embedded Systems diploma is awarded by the New Bulgarian University.

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