

Graduate Program Proposals

Department of Computer & Information
Science & Engineering (CISE)

Graduate Council 3/20/14

CISE Degree Programs: Current Structure

2

MS
Digital Arts & Sciences

MS
Computer Science
Liberal Arts & Sciences

PhD
Computer Engineering

MS
Computer Engineering

BS
Digital Arts & Sciences

BS
Computer Science
Liberal Arts & Sciences

BS
Computer Science
Engineering

BS
Computer Engineering
Joint with Elect & Comp Eng

CISE Degree Programs: Proposed Structure

3

Core Programs

MS
Digital Arts & Sciences

MS
Computer Science
Liberal Arts & Sciences

PhD
Computer Science

PhD
Computer Engineering

MS
Computer Science
Engineering

MS
Computer Engineering

BS
Digital Arts & Sciences

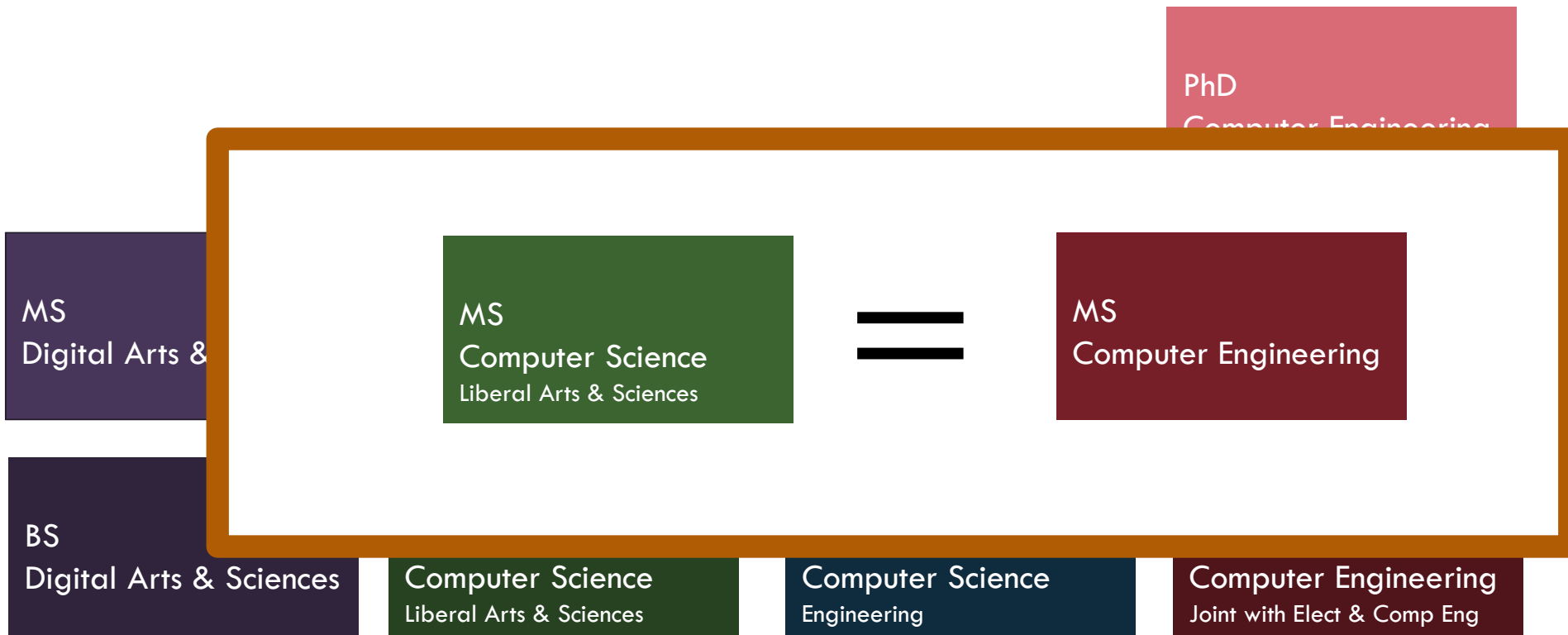
BS
Computer Science
Liberal Arts & Sciences

BS
Computer Science
Engineering

BS
Computer Engineering
Joint with Elect & Comp Eng

CISE Degree Programs: Current Structure

4



CISE Degree Programs: Proposed Structure

5

Core Programs

PhD

PhD

MS
Digital Arts &

MS
Computer Science
Liberal Arts & Sciences

≠

MS
Computer Science
Engineering

≠

MS
Computer Engineering

BS
Digital Arts & Sciences

Computer Science
Liberal Arts & Sciences

Computer Science
Engineering

Computer Engineering
Joint with Elect & Comp Eng

CISE Degree Programs: Proposed Structure

6

Core Programs

PhD

PhD

MS
Digital Arts &

MS
Computer Science
Liberal Arts & Sciences

≠

MS
Computer Science
Engineering

≠

MS
Computer Engineering

Interdisciplinary

Science
Sciences

Computer Engineering

Proposed Core Requirements

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CS CLAS (9)	CS Engineering (12)	Comp Eng (12)
COT 5405 Analysis of Algorithms	COT 5405 Analysis of Algorithms COP 5555 Programming Language Principles	COT 5405 Analysis of Algorithms CDA 5155 Computer Architecture Principles
<p>2 from 5:</p> <ul style="list-style-type: none"> • COT 5615 Mathematics for Intelligent Systems • COT 6315 Formal Languages and Computation Theory • CNT 5106C Computer Networks • COP 5536 Advanced Data Structures • COP 5555 Programming Language Principles 	<p>2 from 4:</p> <ul style="list-style-type: none"> • CDA 5155 Computer Architecture Principles • COP 5615 Distributed Operating System Principles • CNT 5106C Computer Networks • COP 5536 Advanced Data Structures 	<p>2 from 3:</p> <ul style="list-style-type: none"> • CNT 5106C Computer Networks • COP 5615 Distributed Operating System Principles • CDA 5636 Embedded Systems

Other Requirements (non-thesis)

8

CS CLAS (21)	CS Engineering (18)	Comp Eng (18)
21 graduate-level credits: <ul style="list-style-type: none">• At least 9 CISE• At least 9 non-CISE, with at least 3 CLAS• The student's program must form a coherent specialization which must be approved by the Graduate Affairs Committee.	18 graduate-level credits: <ul style="list-style-type: none">• At least 12 CISE• Max 6 non-CISE with approval	18 graduate-level credits: <ul style="list-style-type: none">• At least 9 CISE• Max 9 ECE or other non-CISE courses with approval
30 Credits total	30 Credits total	30 Credits total

Other Requirements (thesis)

9

CS CLAS (21)	CS Engineering (18)	Comp Eng (18)
<p>21 graduate-level credits:</p> <ul style="list-style-type: none">• At least 6 CISE non-research• At least 6 non-CISE, with at least 3 CLAS• 6 CIS 6971 MS research• The student's program must form a coherent specialization which must be approved by the Graduate Affairs Committee.	<p>18 graduate-level credits:</p> <ul style="list-style-type: none">• At least 9 CISE non-research• Max 6 non-CISE with approval• 6 CIS 6971 MS research	<p>18 graduate-level credits:</p> <ul style="list-style-type: none">• At least 6 CISE• Max 9 ECE or other non-CISE courses with approval• 6 CIS 6971 MS research
30 Credits total	30 Credits total	30 Credits total

Other (common to all)

10

- Up to 1 credit of CIS 6935 (Graduate Seminar) allowed.
- Up to 3 credits of CIS 6905 (Individual Study) allowed.
- EXCLUDES CIS 6910, CIS 6940.
- Up to 3 credits of EGN5949 (internship) allowed.

CISE Degree Programs: Proposed Structure

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PhD Proposal

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- No BOG mechanism for changing the CIP code on a program
- Propose new PhD in Computer Science while maintaining existing PhD in Computer Engineering
 - ▣ students can choose appropriate label based on their research topic
 - ▣ requirements the same
 - ▣ we guess that 2/3 of our PhD students will choose CS once available, both degrees will be viable