B.S. in Computer Science

COMPSCBS.2014 (mrs 998)
60 credits

Effective Date: 04/2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:		☐IWORK
Advisor:	Name	Date

Required courses for admission to the major — 12 Credits

Student must pass the following courses with a grade of C or better.

Course #	*Title*	*Hr.*	*Prerequisites*	*Offered*	*Sem.*	*Grade*
CIS 101	Beginning Programming	3		F,W,S		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
CIS 205	Discrete Mathematics I	3	CIS 101	F,W,S		
IT 280	Computer Networking	3		F,W,S		

To be accepted into this major, you must pass all courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission**. I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CS Program Chair _____ Date _____

Core Requirements — 41 Credits

Classes marked "MO" are for admitted majors only.

CIS 206	Discrete Mathematics II	3	CIS 202, CIS 205		W		
CIS 305	Systems Engineering I	3	CIS 202; Co/Prereq: IS 350	MO	F,W		
CIS 405	Systems Engineering II	3	CIS 305	MO	W,S		
CIS 470	Ethics in Computer & Info Sciences	2	CIS 405	MO	F,S		
CS 203	Object-Oriented Programming II	3	CIS 202		W		
CS 210	Computer Organization	3	CIS 101		S		
CS 301	Algorithms & Complexity	3	CS 203, CIS 206	MO	S		
CS 320	Introduction to Computational Theory	3	CS 203, CIS 206	MO	S		
CS 400	Computer Science Proficiency	0	Last semester in residence	MO	F,W,S		
CS 401	Web Application Programming	3	CS 203 and IS 350		W		
CS 415	Operating Systems Design	3	CS 210, CS 301	MO	W		
CS 420	Programming Languages	3	CS 301, CS 320	MO	S		
CS 490R	Advanced Topics in Computer Science	3	CS 301	MO	F,W,S		
CS 490R	Advanced Topics in Computer Science	3	CS 301	MO	F,W,S		
IS 350	Database Management Systems	3	CIS 101	MO	F,W		

Math and Science Requirements — 7 Credits

Students majoring in CS are expected to take Calculus (Math 119 or Math 112/113) in fulfillment of their "Quantitative Reasoning" General Education requirement

MATH 221	Principles of Statistics I	3	MATH 110 or 107 or ACT Math Score of 24+ or SAT Math Score of 590+	F,W,S		
PHYS 121/L	General Physics I/ Lab	4	MATH 112 and either High School Trigonometry or MATH 111	F,W		

Supplemental Courses — 0 Credits

For students considering graduate school, we recommend taking MATH 343 and one additional lab-based course from the list below

MATH 343	Elementary Linear Algebra	3	MATH 112 or MATH 119	F-odd, W-even, S-even		
PHYS 220/L	General Physics II/ Lab	4	PHYS 121	F,S		
PHYS 221/L	General Physics III/Lab	4	PHYS 121	S		
CHEM 105/L	General Chemistry I/ Lab	4	MATH 110 or equivalent	F,W		
BIOL 212/L	Marine Biology/Lab	4	BIOL 100 or BIOL 112	S		

Total Credits Mapped for Graduation:

1. One D+, D, D- is allowed above. All other credits must be C- or better.
2. One retake is allowed per class, for up to three classes. Additional retakes require special permission. _____

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.

B.S. in Computer Science

COMPSCBS.2014 (mrs 998)
60 credits

Effective Date: 04/2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:		☐IWORK
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Required courses for admission to the major — 12 Credits

Student must pass the following courses with a grade of C or better.

Course #	*Title*	*Hr.*	*Prerequisites*	*Offered*	*Sem.*	*Grade*
CIS 101	Beginning Programming	3		F,W,S		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
CIS 205	Discrete Mathematics I	3	CIS 101	F,W,S		
IT 280	Computer Networking	3		F,W,S		

To be accepted into this major, you must pass all courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission**. I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CS Program Chair _____ Date _____

Core Requirements — 41 Credits

Classes marked "MO" are for admitted majors only.

CIS 206	Discrete Mathematics II	3	CIS 202, CIS 205		F		
CIS 305	Systems Engineering I	3	CIS 202; Co/Prereq: IS 350	MO	F,W		
CIS 405	Systems Engineering II	3	CIS 305	MO	W,S		
CIS 470	Ethics in Computer & Info Sciences	2	CIS 405	MO	F,S		
CS 203	Object-Oriented Programming II	3	CIS 202		F		
CS 210	Computer Organization	3	CIS 101		W		
CS 301	Algorithms & Complexity	3	CS 203, CIS 206	MO	W		
CS 320	Introduction to Computational Theory	3	CS 203, CIS 206	MO	W		
CS 400	Computer Science Proficiency	0	Last semester in residence	MO	F,W,S		
CS 401	Web Application Programming	3	CS 203 and IS 350		F		
CS 415	Operating Systems Design	3	CS 210, CS 301	MO	F		
CS 420	Programming Languages	3	CS 301, CS 320	MO	S		
CS 490R	Advanced Topics in Computer Science	3	CS 301	MO	F,W,S		
CS 490R	Advanced Topics in Computer Science	3	CS 301	MO	F,W,S		
IS 350	Database Management Systems	3	CIS 101	MO	F,W		

Math and Science Requirements — 7 Credits

Students majoring in CS are expected to take Calculus (Math 119 or Math 112/113) in fulfillment of their "Quantitative Reasoning" General Education requirement

MATH 221	Principles of Statistics I	3	MATH 110 or 107 or ACT Math Score of 24+ or SAT Math Score of 590+	F,W,S		
PHYS 121/L	General Physics I/ Lab	4	MATH 112 and either High School Trigonometry or MATH 111	F,W		

Supplemental Courses — 0 Credits

For students considering graduate school, we recommend taking MATH 343 and one additional lab-based course from the list below

MATH 343	Elementary Linear Algebra	3	MATH 112 or MATH 119	F-odd, W-even, S-even		
PHYS 220/L	General Physics II/ Lab	4	PHYS 121	F,W		
PHYS 221/L	General Physics III/Lab	4	PHYS 121	S		
CHEM 105/L	General Chemistry I/ Lab	4	MATH 110 or equivalent	F,W		
BIOL 212/L	Marine Biology/Lab	4	BIOL 100 or BIOL 112	S		

Total Credits Mapped for Graduation:

1. One D+, D, D- is allowed above. All other credits must be C- or better.
2. One retake is allowed per class, for up to three classes. Additional retakes require special permission. _____

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.

B.S. in Information Systems

ISBS.2017 (mrs 1265)
68-67 credits

Effective Date: 09/2017

Name of Student:		
Student ID #:		Graduation Date
Home Country:		☐ IWORK
Advisor:	Name	Date

Required courses for admission to the major — 18 Credits

Course #	*Title*	*Hr.*	*Prerequisites*	*Offered*	*Sem.*	*Grade*
CIS 101	Beginning Programming	3		F,W,S		
CIS 200	Fundamentals of Information Systems and Technology	3		F,W,S		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
IT 224/L	Computer Hardware and Systems Software	3		F,W,S		
IT 240	Fundamentals of Web Design and Technology	3		F,W,S		
IT 280	Computer Networking	3		F,W,S		

To be accepted in to this major, you must pass CIS 200 with a B- or better and all other courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission**. I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CIS Program Chair _____ Date _____

Core Requirements — 26 Credits

Classes marked "MO" are for admitted majors only.

CIS 205	Discrete Mathematics I	3	CIS 101		F,W,S		
CIS 305	Systems Engineering I	3	CIS 202	MO	F,W		
CIS 405	Systems Engineering II	3	CIS 305, IS 350	MO	W,S		
CIS 470	Ethics in Computer and Information Sciences	2	ENGL 315 or ENGL 316 or equivalent	MO	F,S		
IS 350	Database Management Systems	3	CIS 101	MO	F,W		
IS 400	Information Systems Proficiency	0			F,W,S		
IS 430	Foundations in IT Services, Enterprise Systems, and ERP Skills	3	Jr. or Sr. standing in CIS, BUSM or ACCT	MO	F,W		
IS 450	Advanced Database Topics	3	IS 350	MO	S		
IS 485	Project Management and Practice	3	CIS 405	MO	F,S		
MATH 221	Principles of Statistics (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 107 or 110		F,W,S		

Advanced Content Area Electives — 9-11 Credits

GROUP 1: Any additional 400-level courses in CS, IS or IT or by permission. (6 Hours)

GROUP 2: Choose one. (3-5 hours). *Note: Many Master's Programs require incoming students to have completed calculus.*

MATH 112	Calculus I	5	College Algebra and Trigonometry experience	F,W,S		
MATH 119	Applied Calculus	4	College Algebra experience	W		
CIS 206	Discrete Mathematics II	3	CIS 202, 205	F		

Fundamental Skills "Minor" in an Environment where IS can be applied — 15 Credits

IS professionals must understand their chosen employment environment and prepare to function effectively in it. Each student must complete at least 15 credits in a cohesive body of course work for such an environment. ACCT 201 is required, select 12 more credit hours from: ACCT 203, ECON 200, ECON 201, ENTR 180, ENTR 283, ENTR 285, ENTR 375R, ENTR 380, ENTR 383, ENTR 385, BUSM 180, BUSM 304, BUSM 308, BUSM 310, BUSM 320, BUSM 342, BUSM 361.

ACCT 201	Introduction to Financial Accounting	3		F,W,S		

Total Credits Mapped for Graduation:

1. One D+, D, D- is allowed above. All other credits must be C- or better. _____
2. One retake is allowed per class, for up to three classes. Additional retakes require special permission. _____
3. A department-approved assessment test must be taken during your last full semester at BYUH, and is recommended annually. _____

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.

Last Revision 11/7/17

B.S. in Information Technology

ITBS.2012 (mrs 732)
68 credits

Effective Date: 8/2012

Name of Student:		
Student ID #:		Graduation Date
Home Country:		☐IWORK
Advisor:	Name	Date

Required courses for admission to the major — 15 Credits

Course #	*Title*	*Hr.*	*Prerequisites*	*Offered*	*Sem.*	*Grade*
CIS 101	Beginning Programming	3		F,W,S		
CIS 200	Fundamentals of Information Systems and Technology	3		F,W,S		
IT 224/L	Computer Hardware and Systems Software/Lab	3		F,W,S		
IT 240	Fundamentals of Web Design and Technology	3		F,W,S		
IT 280	Computer Networking	3		F,W,S		

To be accepted in to this major, you must pass CIS 200 with a B- or better and all other courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission**. I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CS Program Chair _____ Date _____

Core Requirements — 38 Credits

Classes marked "MO" are for admitted majors only.

CIS 202	Object-Oriented Programming I	3	CIS 101	MO	F,W,S		
CIS 305	Systems Engineering I	3	CIS 202	MO	F,W		
CIS 405	Systems Engineering II	3	CIS 305, IS 350	MO	W,S		
CIS 470	Ethics in Computer and Information Sciences	2	ENGL 315 or ENGL 316 or equivalent	MO	F,S		
CS 401	Web Applications Development	3	CS 203 and IS 350	MO	F		
IS 350	Database Management Systems	3	CIS 101	MO	F,W		
IT 320	Linux Essentials	3	CIS 101		F		
IT 420	Linux Systems Administration	3	IT 320	MO	W		
IT 426	Computer Network Services	3	IT 224/L, IT 280	MO	F		
IT 427	Windows Desktop Configuration	3	IT 224/L, IT 280	MO	W		
IT 440	Foundations of Human-Computer Interactions	3	CIS 305, IT 240, MATH 221	MO	W		
IT 480	Computer Network Design	3	IT 280	MO	W		
IT 481	Information Assurance and Security	3	IT 280	MO	F		

Math Requirement — 6 Credits

CIS 205	Discrete Mathematics I	3	CIS 101	F,W,S		
MATH 221	Principles of Statistics (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 107 or 110	F,W,S		

Elective Requirements — 9 Credits

9 hours in additional CIS, CS, IS, or IT coursework at the 300 level or above

Total Credits Mapped for Graduation:

1. One D+, D, D- is allowed above. All other credits must be C- or better. _____
2. One retake is allowed per class, for up to three classes. Additional retakes require special permission. _____
3. A department-approved assessment test must be taken during your last full semester at BYUH. _____

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.

Last Revision 11/7/17