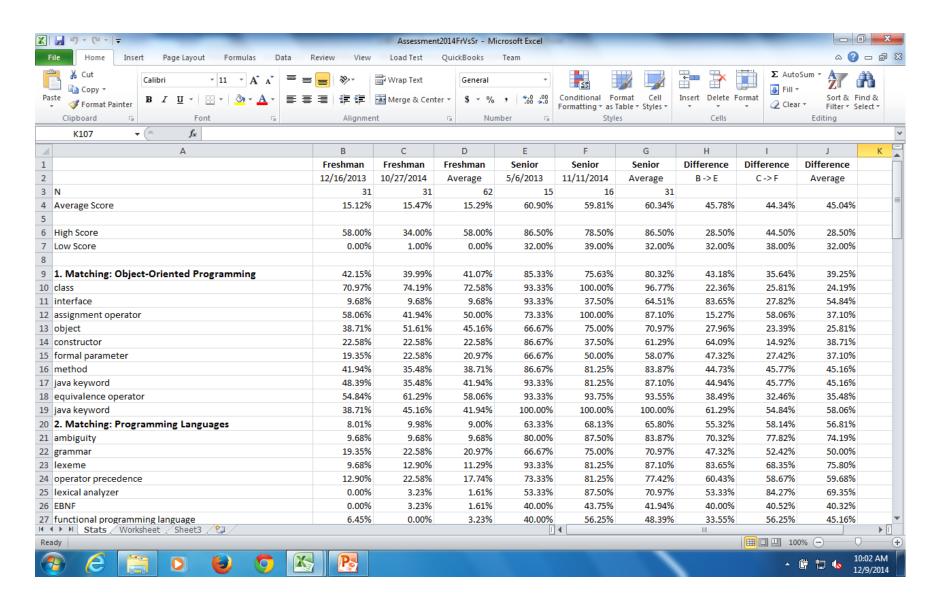
# 2014 CS Program Assessment



## CS Program Internal Review 2014

- First USI CS Program Review in 2011
- USI Recommendations given in 2012
- ACM Computer Science Curricula 2013
  - Over 500 pages
  - Includes exemplars
- USI CS Program Review in 2015



### Computer Science Curricula 2013

Curriculum Guidelines for Undergraduate Degree Programs in Computer Science

December 20, 2013

The Joint Task Force on Computing Curricula Association for Computing Machinery (ACM) IEEE Computer Society

A Cooperative Project of







#### ACM CS2013 Recommendations

- 18 Knowledge Areas (KAs)
- 160 Knowledge Units (KUs)
- 165 Tier-1 Lecture Hours (100% ideal)
- 143 Tier-2 Lecture Hours (over 70% ideal)
- Optional Lecture Hours (program specific)



# Plotting Lecture Hours

Program Review										
Computer Science										
February, 2014										
USI CORE CS COURSES										
ACM CS2001	CS111o									
USI Course	CS258			Total			Recommended		Deficiencies	
	Tier 1	Tier 2	Elective	Tier 1	Tier2	Elective	Tier 1	Tier 2	Tier 1	Tier 2
CS2013										
Description										
DS/DiscreteProbability				2	0	0	6	2	4	2
GV/FundamentalConcepts				0	0	0	2	1	2	1
HCI/Foundations				2	0	4	4		2	
PD/Paralleis mFundamentals				1	0	0	2		1	
PD/ParallelDecomposition				0	0	0	1	3	1	3
PD/CommunicationAndCoordination				0	0	0	1	3	1	3
PD/ParallelAlgorithmsAnalysisAndProgramming				0	0	0		3		3
SF/CrossLayerCommunications				0	0	0	3		3	
SF/StateAndStateMachines				3	0	0	6		3	
SF/Parallelism				0	0	0	3		3	
SF/Evaluation				2	0	0	3		1	
SF/VirtualizationAndIsolation				0	1	0		2		1
SF/ReliabilityThroughRedundancy				0	0	0		2		2
Totals	24	9	2	144	128	323	165	143	21	15



# **USI CS Program Findings**

- 18 Knowledge Areas (KAs)
- 160 Knowledge Units (KUs)
- 165 Tier-1 Lecture Hours (144 covered 87.2%)
- 143 Tier-2 Lecture Hours (128 covered 89.5%)
- Optional Lecture Hours (323 hours)



# **Proposed Content Changes**

- Add 4 hours of Discrete Probability to CS215
- Reevaluate ECE241 hours
- Add Graphics/Visualization project to CS358
- Add Human-Computer Interfacing to CS358
- Add Parallelism hours to CS365
- Add Parallel Programming to CS379
- Add Speed Evaluation to CS321
- Require CS458



# Proposed USI CS Curriculum

- 18 Knowledge Areas (KAs)
- 160 Knowledge Units (KUs)
- 165 Tier-1 Lecture Hours (165 covered 100%)
- 143 Tier-2 Lecture Hours (127 covered 88.8%)
- Optional Lecture Hours (305 hours)

