Requirements for Obtaining a Bachelors Degree in Chemical Engineering at Brigham Young University

Tom Fletcher

Ch En 191
September 11, 2014

Agenda for Day 2

- Assignment Due Last Th: **Info Sheet with signature for FERPA and alias name**
- Assignment Due Today: **Resume**
  - **Pass to 2 classmates to review (now!)**
  - I will review these after class next week, or earlier if you bring them by my office
- Assignment due next week: **Master of Learning**
- Mark your own attendance
- Hints on ChE Curriculum
- Meet your advisor

Resources for Questions on ChE Curriculum

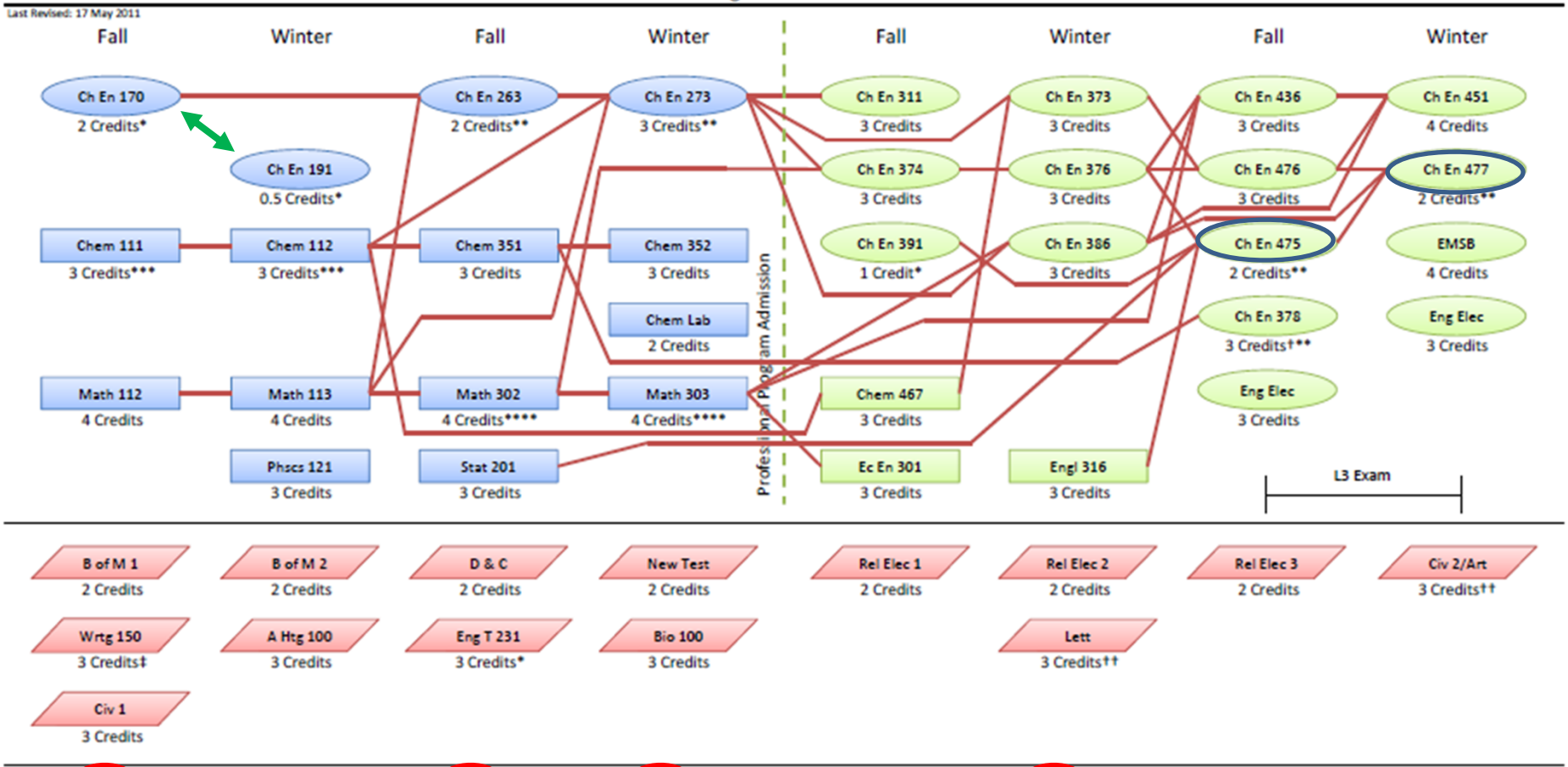
- Major academic plan (MAP)
- ChE web pages
  - cheme.byu.edu
- Your ChE advisor
- College advisement center
  - Please declare your major as soon as you are comfortable with this major

Six Principles

1. Flow Chart
2. Math & Chemistry
3. Professional Program
4. Electives
5. GE tips
6. Course Plan Document

Chemical Engineering Flow Chart (Eight Semesters)

Catalog Year 2011-2012



Color Legend

- Preprofessional Course
- Professional Program Courses
- University Core

Shape Legend

- Major-required Courses (Chemical Engineering)
- Major-required Courses (non-Chemical Engineering)
- University Core Courses

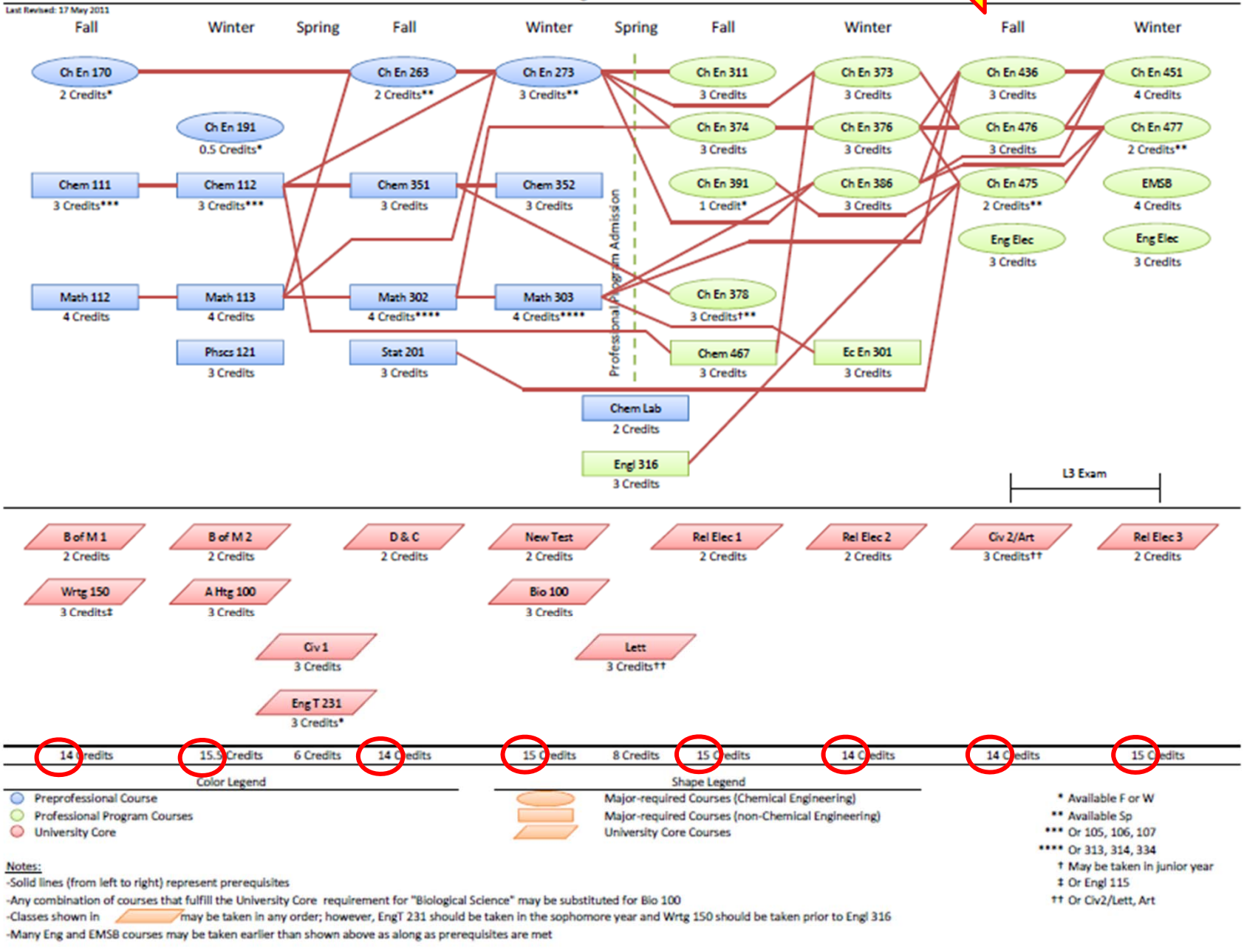
* Available F or W
** Available Sp
*** Or 105, 106, 107
**** Or 313, 314, 334
† May be taken in junior year
‡ Or Engl 115
†† Or Civ2/Lett, Art

Notes:

-Solid lines (from left to right) represent prerequisites
-Any combination of courses that fulfill the University Core requirement for "Biological Science" may be substituted for Bio 100
-Classes shown in may be taken in any order; however, EngT 231 should be taken in the sophomore year and Wrtg 150 should be taken prior to Engl 316
-Many Eng and EMSB courses may be taken earlier than shown above as along as prerequisites are met

Chemical Engineering Flow Chart (Includes Two Spring Terms)

Catalog Year 2011-2012



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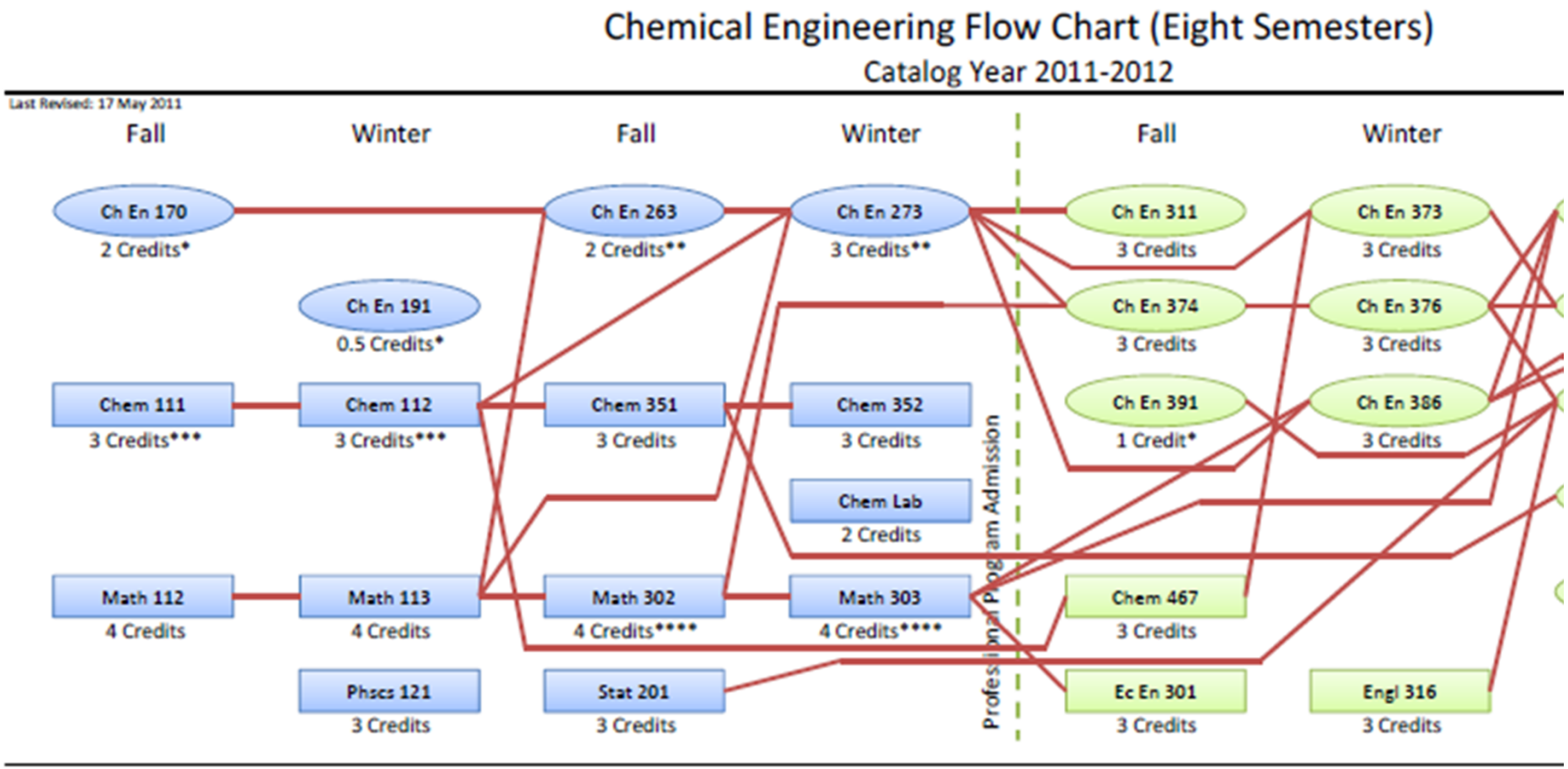
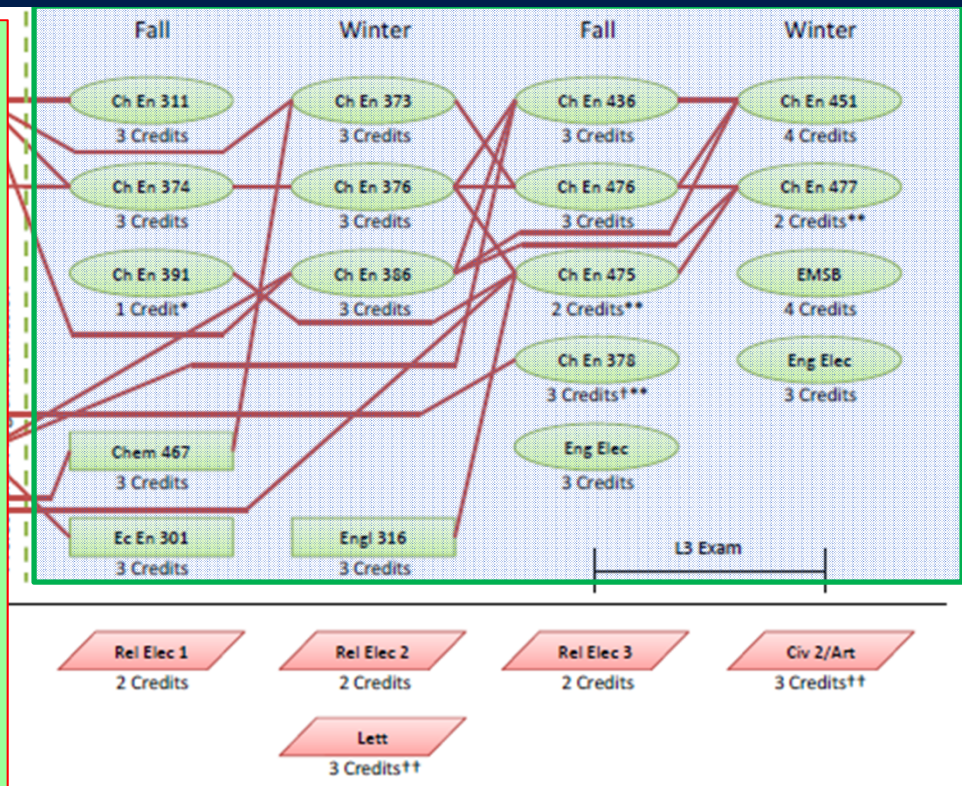


Note that Math and Chemistry are prerequisites to many other classes

3. Professional Program

- These are classes in the professional program
- You need to be "accepted" into the professional program after the sophomore year
- You have to take most of the pre-professional classes before admission to the professional program
  - ✓ MUST have ChEn 273
- Classes only offered once a year, so get things lined up correctly!
- Do your best in Math, Chemistry, and especially ChEn 273



17 Credits	15.5 Credits	17 Credits	17 Credits	15 Credits	17 Credits	16 Credits	16 Credits

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4. Technical Electives (pick one area or mix and match)

- Energy/Environment
- Nuclear Engineering
- Kinetics/Catalysis
- Thermodynamics/Thermophysical Properties
- Bioengineering
- Modeling/Numerical Methods
- Mechanical, Civil, or Electrical Engineering
- School of Technology
- Geology for Engineers
- Graduate School

6 hours of Engineering
300 level or above

- Engineering
- Math
- Science
- Business

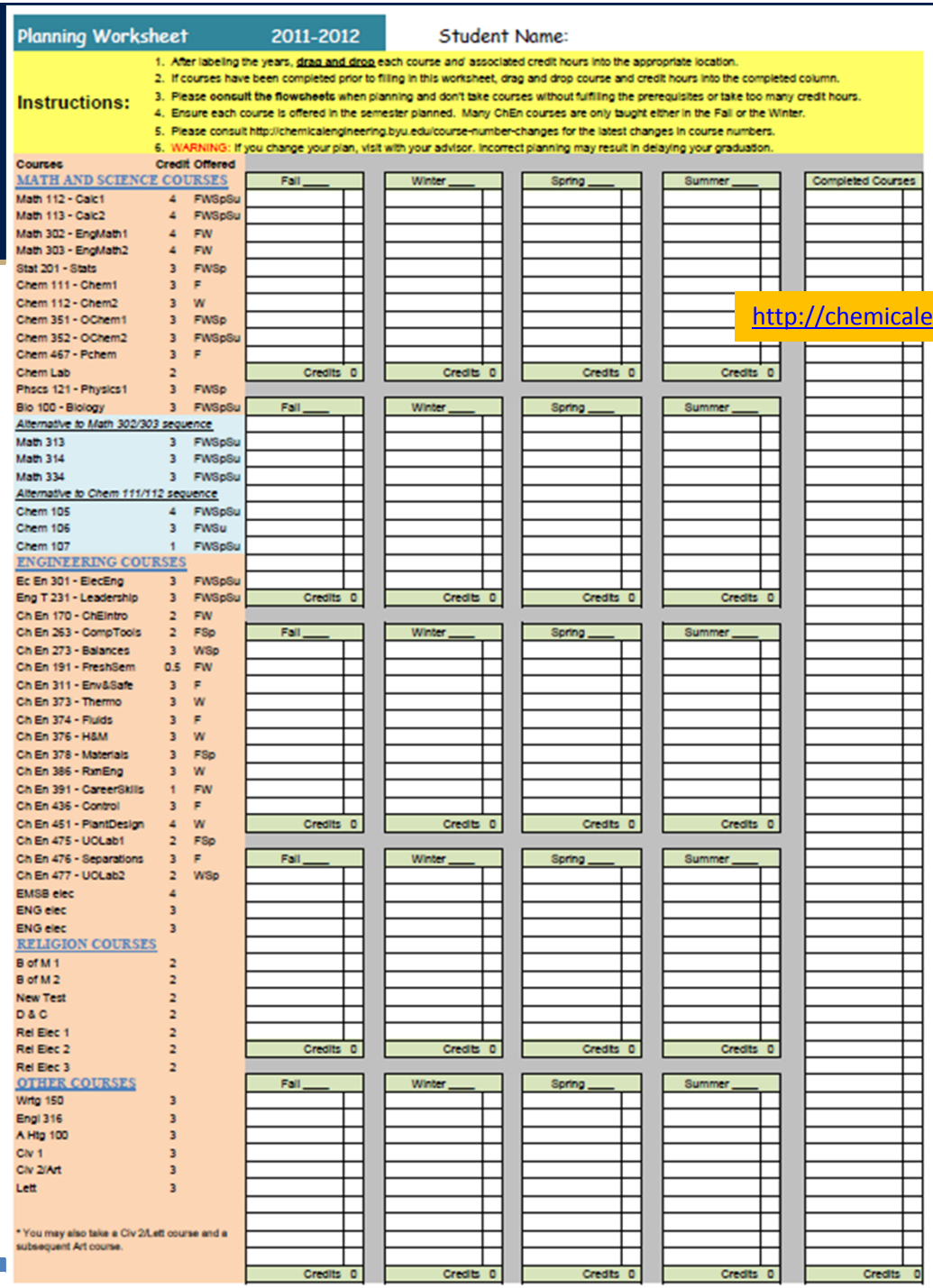
4 hours of EMSB
300 level or above

5. GE Tips

- GCA is filled by Engineering Technology 231
  - Eng T 231 is a leadership class, not an English class
- Civ 2, Arts, and Letters requirements can be filled by two classes, not three
  - Take a Civ 2 class that double counts as either Arts or Letters, but not GCA

6. Course Plan Document

- Prepare a course plan indicating when you will take the courses required for graduation
- Use the MS Excel Planning Worksheet to help you with the planning
  - on the department web site
  - emailed to you
- This will be the **Course Plan Assignment**
  - **You will have to meet with your ChE faculty advisor!**
  - **Enter your plan on MyMap**



Planning Worksheet 2011-2012 Student Name:

Instructions:

1. After labeling the years, drag and drop each course and associated credit hours into the appropriate location.
2. If courses have been completed prior to filling in this worksheet, drag and drop course and credit hours into the completed column.
3. Please **consult the flowsheets** when planning and don't take courses without fulfilling the prerequisites or take too many credit hours.
4. Ensure each course is offered in the semester planned. Many ChEn courses are only taught either in the Fall or the Winter.
5. Please consult http://chemicalengineering.byu.edu/course-number-changes for the latest changes in course numbers.
6. WARNING: If you change your plan, visit with your advisor. Incorrect planning may result in delaying your graduation.

Courses	Credit	Offered
MATH AND SCIENCE COURSES		
Math 112 - Calc1	4	FWSpSu
Math 113 - Calc2	4	FWSpSu
Math 302 - EngMath1	4	FW
Math 303 - EngMath2	4	FW
Stat 201 - Stats	3	FWSp
Chem 111 - Chem1	3	F
Chem 112 - Chem2	3	W
Chem 351 - OChem1	3	FWSp
Chem 352 - OChem2	3	FWSpSu
Chem 467 - Pchem	3	F
Chem Lab	2	
Phscs 121 - Physics1	3	FWSp
Bio 100 - Biology	3	FWSpSu
Alternative to Math 302/303 sequence		
Math 313	3	FWSpSu
Math 314	3	FWSpSu
Math 334	3	FWSpSu
Alternative to Chem 111/112 sequence		
Chem 105	4	FWSpSu
Chem 106	3	FWSu
Chem 107	1	FWSpSu
ENGINEERING COURSES		
Ec En 301 - ElecEng	3	FWSpSu
Eng T 231 - Leadership	3	FWSpSu
Ch En 170 - ChEIntro	2	FW
Ch En 263 - CompTools	2	FSp
Ch En 273 - Balances	3	WSp
Ch En 191 - FreshSem	0.5	FW
Ch En 311 - Env&Safe	3	F
Ch En 373 - Thermo	3	W
Ch En 374 - Fluids	3	F
Ch En 376 - H&M	3	W
Ch En 378 - Materials	3	FSp
Ch En 386 - RxnEng	3	W
Ch En 391 - CareerSkills	1	FW
Ch En 436 - Control	3	F
Ch En 451 - PlantDesign	4	W
Ch En 475 - UCLab1	2	FSp
Ch En 476 - Separations	3	F
Ch En 477 - UCLab2	2	WSp
EMSB elec	4	
ENG elec	3	
ENG elec	3	
RELIGION COURSES		
B of M 1	2	
B of M 2	2	
New Test	2	
D & C	2	
Rel Elec 1	2	
Rel Elec 2	2	
Rel Elec 3	2	
OTHER COURSES		
Wrtg 150	3	
Engl 316	3	
A Htg 100	3	
Civ 1	3	
Civ 2/Art	3	
Lett	3	

* You may also take a Civ 2/Lett course and a subsequent Art course.

Fall ___ | Winter ___ | Spring ___ | Summer ___ | Credits 0

Completed Courses | Credits 0

http://chemicalengineering.byu.edu/PlanningWorksheet2013-2014.xlsx

Or

Cheme.byu.edu

- Undergraduate Program
- Course Planning
- Planning Worksheets
- Pick the year that you officially declared ChE as you major

Advice

- **Get Involved**
  - AIChE
  - Biomedical club
  - Career Fair
  - Etc.
- **Study in groups**
  - No one can do this alone
- **We're not ogres**
  - Come see us in the office

Meet the Faculty

Morris D. Argyle
Catalysis

Larry L. Baxter
Sustainable Energy

Brad C. Bundy
Biochemical

Lon Cook
Biomedical

Thomas Fletcher
Combustion

John N. Harb
Electrochemical Systems

William C. Hecker
Catalysis

John Hedengren
Process Systems Engineering

Thomas A. Knotts
Molecular Simulation

Randy S. Lewis
Biochemical

David O. Lignell
Combustion

William G. Pitt
Biochemical

Dean R. Wheeler
Electrochemical Systems

Vince Wilding
Thermophysical Properties

Matt Memmott
Nuclear

Meet Your Advisor

Student	Advisor
Adams Byron James	Argyle
Adams Kendall Paige	Baxter
Applegarth David Alan	Wilding
Arment Joshua Randall	Bundy
Arrington Kelly Jones	Fletcher
Barton Austin Neal	Hecker
Bates Connor	Hedengren
Bertola Dallas Joseph	Harb
Bingham Lauren Ann	Knotts
Bradley Matthew William	Bundy
Brady Cassandra Jane	Lignell
Cable Peter Isaac	Pitt
Casper Trevor Wallace	Hedengren
Christiansen Spencer James	Cook
Cole David Lewis	Wilding
Cox Michael James	Harb
Curtis Jeffrey Michael	Memmott
Curtis Regan Frances	Argyle
Dearden Brent Richard	Baxter
Devonshire Madison Leanne	Bundy
Driskell Zachary Samuel	Fletcher
Earl Conner Clair	Hecker
Ehlen Jacob Paul	Harb
Feist Donovan Robert	Hedengren
Ford Hayley	Harb
Gainer Joshua Zachary	Knotts
Gillespie James Oliver	Lignell
Greenlief Kyleigh Rae	Pitt
Griggs Matthew Bonham	Cook
Gutierrez-Vargas Tomas	Harb
Guymon James Michael	Wilding
Hales Zachary Christian	Baxter
Hanson Luke Fremming	Memmott
Hart Andrew Davis	Argyle
Hatfield Mitchell Reed	Baxter
Hedman Kevin Stewart	Bundy
Hickman Colton Michael	Knotts
Jackson Brandon Allen	Hecker
Kaiser David Alan	Fletcher
Kauwe Steven Kaaipuupuu Keani	Hecker
Keck Chandler Norman	Hedengren
Kerr Austin William	Harb
Kraus Garrett Lee	Knotts
Larsen Harald Douglas Charles	Lignell
Larson Bruce Walker	Baxter
Lasley Trevin Allan	Bundy
Lemon Ashlen	Pitt
Leverson Richard james	Cook
Lord Steven Jacob	Wilding
Loveless Brandon Ray	Cook
Matthews Sarah Anne	Memmott
McClellan Daniel Scott	Argyle
McMullan Brian Matthew	Baxter
McPherson Michael Dale	Bundy
Miller Max Martin	Fletcher
Mills Brady Pierce	Hecker
Muir Colin Michael	Hedengren
Myler Mitchell Joseph	Cook
Nation Richard Alexander	Fletcher
Nelson Ethan Allred	Fletcher
Oborn Jordan Ray	Harb
Pendleton Sterling Russell	Harb
Perego Alessandro	Cook
Petersen Brian Mark	Knotts
Peterson Brannan Carl	Lignell
Pratt Rocky John	Pitt
Reeder Trevor Goodwin	Cook
Robertson Chase Daniel	Wilding
Rosqvist Sterling	Memmott
Roth Clark Alan	Argyle
Schaumann Jared Michael	Baxter
Schvaneveldt Mark H	Bundy
Schwallier Camille M	Fletcher
Shutt Timothy Robert	Hecker
Stone Anna	Hedengren
Taylor Sloane Abbagail	Harb
Troemner Aaron Carl	Knotts
Van Wagoner Colton Taylor	Lignell
Wade Daniel Christopher	Pitt
Waite Greg Randall	Cook
Ward Travis Jay	Wilding
Westover Clarissa Celeste	Memmott
Wood Connor	Argyle
Young Matthew Owen	Baxter