Please provide your feedback to the CFY Committee here:	Topic category	Committe response
Suggest ENGR 1301 be moved up to 4 credit hours (matches current science courses CHEM 1251 and MEGR 1100 from credit hour standpoint. Reduce ENGR 1300 to 1 credit hour from 2. Move all of the projects in ENGR 1300 to ENGR 1301. 1301 layout would be 3 credit hours of lecture and 1 credit hour of "lab" dedicated to the projects removed from ENGR 1300. ENGR 1300 would mirror ENGR 3295, ENGR 1100, ENGR 0600 in format and approach focusing on profession exploration and guest speakers (upper class engineering students, alumni, and engineering faculty) + academic success.	Framework	We have considered a variety of combinations of credit hour and which course buckets to place topics in. That was partially driven by transfer credits.
(1) The collapsing of many major-specific early courses into a handful of FEGR (first-year) courses will not achieve the level of learning needed by any one major. There is too much ground to cover over too wide of an application area in these classes.	Framework	Noted. The CFY is more focused on exciting new College of Engineering students and giving them a solid foundation for whichever major they choose. This leads us to a broad coverage of topics that don't service any particular major over another. The committee believes the CFY as designed will produce much stronger 2nd Year students than we currently have.
(2) The new FY courses subtract credits from the majors needed to build important skills.	Framework	
Further, it does not seem likely that certain subjects in these catch-all courses will have sufficient time dedicated to them. For example, it seems unlikely that future ME or MET students would receive instruction on engineering graphics and CAD that sufficiently prepares them to continue in their majors without repeating this content at more in-depth level in their chosen department, which does not seem like an effective use of credit hours.	Framework	
The 120 credit hours is already a tight requirement for giving a solid well rounded engineering education. By having both the common first year and 120 credit hours we start to take away more of the depth of the degree. We also don't want to be a "lesser State" which has their own common first year and more credits. Many of the first-year classes that we are proposing may have too much in them. Is it possible to continue with 1201/1202 but revise the content and expectations in those two classes?	Framework	This is a trade between status quo and CFY (A go/no-go vote will address this one way or the other). Sticking to the status quo will neither break down the barriers to changing directions for First Year students nor address the expanding variety of Math backgrounds that we are seeing in First Year students.
As the students select their program after semester 1, they have a pretty good idea of what to study. Hence, in the 2nd semester, an elective should resemble a given concentration. I recommend replacing the logic or visualization course with an elective. Each program can then provide an elective that matches their needs.	Framework	At UNC Charlotte, students register for the upcoming semester about half-way through the current semester. This recommendation would require them to decide their major half-way through the first semester, which we think is too early.
A curriculum designer from CTL should be involved in the design of the 4 new CFY courses. Based on the number of learning objectives and topics covered in the draft syllabi, it is clear that too many learning outcomes and topics are expected to be covered in these first year classes.	Implementation	Thanks for the great suggestions - we support most of them, but they are not in this committee's direct purvue. We have forwarded to the Dean's office for consideration if CFY moves forward. We expect that this feedback will be shared with implementation committees.
When it comes time to fully develop these courses, I am happy to help provide content, activities, guest lecture, etc. Questions were raised about designing activities in ENGR1300 around various engineering majors without needing significant background. This is what I and others do all the time in Outreach and Recruiting: we design engineering themed activities for kids K-12. If you want to design these courses with significant impact on the students, I recommend leveraging the faculty and staff that are doing this outreach, or at least those faculty that have studied Engineering Education. That will help us put our best foot forward in the Common First Year.	Implementation	
Faculty who teach first year engineering classes should be on the design committees for each of the classes.	Implementation	
Would be useful to include number of weeks or lectures per topic to indicate what will be the relative emphasis of syllabus topics	Implementation	
One thing we don't do enough of is expose UG students to research. I recall when I was at Univ Maryland they would ask professors to give 5-10 minute presentations on their work/research to freshman. Perhaps we can add this to ENGR-1300. It would also be nice to discuss in ENGR-1300 the different academic career paths (i.e., explain to students what is an MS degree, PhD, postdoc, etc.) and the roles that those with advanced training can have in industry, government labs, academia and what it means to do research.	Implementation	
I would like to provide feedback on ENGR-1303 course Considering that technical drawing, solid modelling and technical drafting topics are department specific, this course can have the COMMON CODE for all departments but the content can be designed by specific departments. This is also critical in terms of the software and lab facilities to be used. The technical drawing concept for civil, electrical and mechanical engineering disciplines are majorly different and as well as the software packages used for such purpose is also different. It may not be suitable for 'One course design fits for all' approach.	Implementation	
an idea for the 3D visualization class: https://puzzleaday.wordpress.com/2019/10/12/a-shape-that-is-a-square-circle-and-triangle/	Implementation	
I am hopeful that the content contained in these new common first year courses (and amount of outside of class effort) is commensurate with the number of credit hours per university policy. As it stands now, many students taking Intro to Engineering and Intro to ET in freshman year spend far more effort on the myriad of assignments in those courses than on assignments/studying for their other first-year courses, sometimes to the detriment of the grades and learning outcomes in those other courses.	Implementation	

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I just want to echo my concerns from CEFO on 1/23 that we need a plan in place for the transition out of CFY into Sophomore in each major. I know it is unlikely that one department receives an overwhelming majority of students in free choice, but every department does have limited resources / instructors to deliver courses and advising. So we really need a plan in place to avoid future headaches. There is plenty of time to figure this out still, and we can focus on the first year courses for now, but just don't want to sweep this under the rug. I know that several other CFY programs around the country struggle with this exact problem (Univ Washington for example).	Logistics	We have forwarded to the Dean's office for consideration if CFY moves forward.
If first year Engineering courses are to be taught by both OSDS and other faculties, such as Mech Eng/Civil/Systems/Electrical, will all be required to teach over the summer, even if on a 9-month contract? If not, won't the courses be different in the summer than they are for Spring and Fall semesters, especially if (as we have heard), the courses will be getting a "deep dive" into the various disciplines (Mech/Civil/Elec/Sys) by such faculty members?	Logistics	CFY courses would be no different than any other courses we teach in the summer, and would be logistically managed appropriately.
It is not clear if the staff/faculty who will instruct the CFY engineering courses have the technical background to adequately cover important perquisite material for more advanced major-specific courses that would follow after.	Logistics	The Dean has indicated that courses will be delivered primarily by the faculty of OSDS with team-taught content from faculty in each department.
One concern of note is that students earning an associates degree in engineering are not typically advised to take CIS 115 (transfer equivalent for ENGR1302). I would warn each of our departments to ensure that, as they redesign their curriculum, failure to have taken ENGR1302 (or a transfer equivalent) not be the sole reason for holding a student back from being to take additional courses towards their degree. For example, a transfer students with an associates in engineering should not find that they can not take a full course load (or their graduation date will ultimately be increased by a semester) because ENGR1302 is a pre-req for a critical pathway in the curriculum.	Logistics	We expect that like today, students will need to complete all the freshman requirements in order to transfer to 2nd Year. The acceptable transfer list is not necessarily complete for any of these courses; we expect that the implementation committees will set the final list of equivalents.
Can conversations take place with the Math Department to offer half term courses for MATH 1101 and MATH 1103?	Logistics	Yes, this will be addressed with the Math Dept
Will ENGR 1300, ENGR 1301, ENGR 1302, and ENGR 1303 be prerequisites for other courses? If not, what would prevent students from waiting until their senior year to take these courses?	Logistics	We currently require all first year requirements be satisfied before moving to second year, we expect the same requirements with CFY. That is, that completion of these four courses will be required before officially matriculating to a major
While taking Calc I and Phys I together solves one of the progression problems, what accommodations are considered for the second year? For example, will the pre-requirements for MEGR 2141 change? In other words, it will be important to look at what the subsequent semesters will look like for students who have all their Gen Ed courses completed and may have started at a lower math.	Logistics	Each program will need to evaluate if there are prereq changes needed for courses in their 2nd-year+ curriculum
Will ENGR 1303 replace ECGR 2103?	Logistics	That will be decided by ECE in their curriculum
The consequences of a student having "the option of specifying their target major, if desired" are not clear. I think this is a good idea in general, but there should be some benefit associated with this --- perhaps they are allowed to take MEGR courses if they are a MEGR student and want to get ahead?	Logistics	Students can take courses beyond the CFY requirement if allowed by a Department, but cannot formally matriculate to a major until the CFY courses are completed, so their focus should be on CFY first.
(3) It is not clear that the logistics (classroom space, labs, etc.), pedagogy (full-thought out courses and syllabi in detail), or expertise (instructors with the right experience) are in place to make the CFY courses successful.	Logistics	We have forwarded to the Dean's office for consideration if CFY moves forward.
Will there be a GPA requirement for each major once the students have finished the first year?	Matriculation	This will be decided by each program.
ENGR1301: The courses in the first year of the committee align with what other universities are doing with the exception of we are missing chemistry. The math and science for engineering course replaces chemistry in our version, but as others mentioned, it might be worth changing to 4 credit hours (and reducing graphic visualization to 2). Since the other 3 ENGR courses are traditional compared to other CFY programs at other schools, they should remain in their current state. Then this math and science course is a "catch all" to make all the departments happy with what content they believe is missing from the other 3. In that case it will need 4 credit hours to fulfill all that content. Even if no additional content is added, the breadth of topics still suggests going to 4, and the visualization doesn't have enough in its current state to warrant 3 credits. There are concerns about who will teach these classes with such diverse content and 800+ students (10-20 sections?). Alternatively, we can replace ENGR1301 with.... Chemistry I. After all, that is what all the other CFY curriculums do. ECE gets ENGR1302 primarily for their own benefit, why not give Chemistry to MEGR and CEES. This further solves the problem of who should teach this class: the Chemistry department. Also transfer equivalency becomes easier. The other math components from ENGR1301 can be absorbed into ENGR1300. ENGR1300 needs to be careful not to become a seminar with only guest speakers as some faculty suggested. Poll the students and find out that the vast majority find the current state of ENGR1201 to be useless because they learn nothing. Bringing useful math and science skills into ENGR1300 would make it more meaningful, and pair well with the later projects.	Chem / 4-hours	As of the beginning of February, CvE, EnvE, EE, CpE, SE, ETEL, and MET each do not need a course to be the equivalent of Chem1 in the freshman year. Most are requesting this course cover relevant Math, Physics and Chemistry topics that will prepare students to succeed in their follow-on courses in each area.
If there is room for it in 1301, it would be good to add a few more chemistry topics, specifically kinetics, solubility/precipitation and acid/base chemistry. Please consider, especially if this class will be expanded to 4 hours.	Chem / 4-hours	

Please provide your feedback to the CFY Committee here:	Topic category	Committe response
In addition to what is currently posted on the CFY page, can you also share the full proposal, e.g. goals, justification, impact data analysis on enrollment etc. if any?	More info	We have shared everything that the committee has produced
The CFY proposal has come a long way since a year ago, and I commend and appreciate the efforts of everyone involved. Thank you for hearing our feedback and making adjustments! I think the math solution is very good, allowing each department to accept Pre Calculus or not, and allowing students options regardless of where they start in math. Good job, I know this wasn't easy!	Remark	Thank you.
Thank you for all your hard work on the CFY. I agree with the clarifications that the committee provided last week regarding the ability of departments to decide which math courses to count towards our allotted 120 credits (i.e. pre-calculus does not have to count towards 120 credits if the department does not wish), the matriculation requirements into the department are left to the department to decide, and that students can declare a major at the time of applying/joining the college.	Remark	Thank you.
Again, not an insurmountable hurtle, but one that should be brought to the attention of our departments. The NC College Transfer Pathway is a fantastic program for a great many of our students (particularly those in underserved communities), and we should be cognizant of not hindering this sizable student population.	Remark	Agreed. We have and will continue to carefully consider the transfer pathways.
If the main learning objective of the intro to engineering and technology class is help students declare a major, the class may be better suited as a seminar class. The departments could be given the opportunity to showcase the degrees, career paths, student orgs, research, etc. We could also have alumni or student panels to help FY students understand the majors.	Syllabus content 1300	Thanks for the great suggestions, which we support, but they are not in this committee's direct purvue. We have forwarded to the Dean's office for consideration if CFY moves forward. We expect that this feedback will be shared with implementation committees.
Will it be possible to change the number of credit hours for ENGR 1300 from 2 to 3? There seem to be a lot of topics in the suggested syllabus. Students already complained that ENGR and ETGR 1201 have 2 credit hours. They think there is too much work for a 2-credit-hour course.	Syllabus content 1300	Our vision is that 1300 will be a completely new course and not be an extension of the current 1201. The implementation committee will need to focus on making sure the appropirate amount of content is included for 2 credit hours.
ENGR-1300: This seems like a great course to getting students introduced to engineering. However, the outline of topics appears to be much more heavy on the soft skills and is less on the technical aspects of engineering. I would like to see more details on what will be covered under topics L and O. Some more math/computing/technical skills development injected into this course would be more useful use of the 2 credit hours (and give students a more honest/representative example of what they should expect in later engineering classes). Compare the syllabus to the course description of a similar course (actually a sequence of two courses) at Virginia tech below. Notice emphasis on data collection/analysis, mathematical modeling, an software tools. *ENGE 1215 and 1216: Foundations of Engineering* *A first-year sequence to introduce general engineering students to the engineering profession, including data collection and analysis, engineering, problem-solving, mathematical modeling, design, contemporary software tools, professional practices and expectations (e.g. communication, teamwork, ethics), and the diversity of fields and majors within engineering.*	Syllabus content 1300	The CFY committee feels that we have created a framework to develop a Common First Year experience that will provide a broad foundational exposure that will invigorate new College of Engineering students with a balance of technical and soft-skill content. The committee believes the CFY as designed will produce much stronger 2nd Year students than we currently have. A number of the topics in the comparitive courses are exisitng in other proposed CFY courses.
ENGR-1301: I would suggest to move the vectors and Newton's Laws portions of this class to ENGR-1300 and convert ENGR-1301 to a standard chemistry class. This change would be consistent with topics L and O of the ENGR-1300 syllabus. Most engineering programs have a standalone chemistry course requirement.	Syllabus content 1301	As of the beginning of February, CvE, EnvE, EE, CpE, SE, ETEL, and MET each do not need a course to be the equivalent of Chem1 in the freshman year. Most are requesting this course cover relevant Math, Physics and Chemistry topics that will prepare students to succeed in their follow-on courses in each area.
I teach the MEGR 1100 course that the ENGR 1301 course is carbon copied from. The course is presently a 4-credit course that covers a vast array of topics. The topics listed in the ENGR 1301 course are the same as those in the MEGR 1100 course and I fear that condensing it to a 3-credit course will cut too much material. If this will be the path moving forward, then narrowing down the topics that are the most important topics to each engineering department will be most beneficial. At it's current state, there isn't an efficient way to reduce from 4-credits to 3 credits while keeping ALL the same topics of material.	Syllabus content 1301	The CFY committee feels that we have created a framework to develop a Common First Year experience that will provide a broad foundational exposure that will invigorate new College of Engineering students. The committee believes the CFY as designed will produce much stronger 2nd Year students than we currently have. Based on various feedback, we agree that the list of topics covered will need to be prioritized and compromised between programs (we added this language to the funcitonal syllabus).

Please provide your feedback to the CFY Committee here:	Topic category	Committe response
ENGR-1302: What language is being used to teach this material? It seems like an important decision that we should agree on (MATLAB, python, Julia, C++ ?) and state in the syllabus. The course outcomes (1), (2), (3) look a bit generic and not specific to this course/syllabus. I would argue that "generative AI" is just one sub-branch of "AI" and a bit narrow in scope (and one of the least relevant to current engineering practice). Other uses of AI include problem solving using graph theory/search, machine learning with neural networks to do regression/classification, etc. that do not necessarily focused on generating synthetic content.	Syllabus content 1302	The CFY committee feels that we have created a framework to develop a Common First Year experience that will provide a broad foundational exposure that will invigorate new College of Engineering students. The committee believes the CFY as designed will produce much stronger 2nd Year students than we currently have. We agree with your "generative AI" comment. We have adjusted the syllabus accordingly.
For the ENGR 1303 Engr Visualization & Graphical Communication course, I would recommend adding "Facility Layout Drawing Examples" for Systems Engineering discipline. These layouts can be more specifically 1. Macro Facility Layout Design, 2. Micro Facility Layout Design and 3. Workstation Design. Thank you.	Syllabus content 1303	Agreed, thanks for the input.
ENGR-1303: I'm afraid that listing MATLAB, topic O, as the last topic might suggest it's not a priority or topic of emphasis here. I urge the syllabus to include importing data in MATLAB or python and visualizing or curve fitting as a more core component of the course introduced earlier on. Visualizing 3D data (surface plots) would also be a nice addition. Outcome (6) mentions CAD models and 3D printing but these are not seen as specific topics below.	Syllabus content 1303	There is no implied significance in the order of topics listed in the syllabi. They are all equally important in our eyes. We will pass this feedback to the implementation committee. Thanks for the surface plot suggestion, we adjusted the syllabus.
I would like to provide my feedback on ENGR1300 Course 1) It may need to include more focus on 'Future of Engineering , Technology and Science' without going to too much details. A visionary content should be provided. 2) Occupational Health and Safety topics may be included 3) Introduction to Information Tech and Applications may be considered. 4) The first year engineering candidates should be well informed and well aware of that use of SOFTWARE is critical/vital. A wide spectrum of software packages may need to be provided in several disciplines 5) This course may need to be jointly delivered by multi-faculty members from various departments to keep the disciplinary balance.	Syllabus content 1300	Great suggestions, we agree this course needs to be visionary and exciting.We will pass this feedback to the implementation committee.
I have some concerns about how much content we are trying to cram into each of the designed courses, and who is properly qualified to teach all of that, but we can discuss more at the brown bag next week.	Syllabus overload	The Dean has indicated that courses will be delivered primarily by the faculty of OSDS with team-taught content from faculty in each department.
The CFY process has been conducted in a manner that is not open to substantial critique. Many faculty seem to have concerns on whether or not the logistical and pedagogical details can be worked out to meet the overall goals of the CFY and the various departments/majors. When these concerns are brought up, we are told that details are not the focus of this stage of the process. In my view, it may very well be these details which make or break the CFY. If the issues pointed out suggest systemic problems with the CFY, they are disregarded, giving the appearance that the CFY is not up for debate, merely performative critique to be disregarded. [My detailed thoughts on the CFY are this: -- *thoughts broken out into individual rows]*	Process	There have been numerous opportunities for input thoughout the process, and the committee has discussed all feedback given over the past year. Not all concerns that have been voiced fall under the purview of this committee, but all of those will be passed forward to the appropriate implementation committees.
The CFY committee has disregarded input from faculty members for an extended period exceeding one year. It is unreasonable to expect that any feedback offered will yield any impact.	Process	
Before official vote, suggest to conduct a college-wide survey of faculty opinion and feedback. If reasonable alignment, voting would be effective. Otherwise, it indicates more deliberation is needed (hope to avoid the same frustration like last fall). The survey can involve verifying common understanding, CFY course requirement, delivery, and perspective of the impact on enrollment, curriculum quality, incoming student quality, transfer students, 4y graduation rate.	Process	Thanks for the suggestion; we have discussed and decided not to move forward with it. Parts of this have already been accomplished with multiple feedback mechanisms.