

Facilitating Graduation Cal Poly Pomona Campus Report

Cal Poly Pomona has accelerated efforts over the last six years to evaluate and enhance its effectiveness in facilitating student success and graduation. These efforts have involved the collaboration of campus constituents across divisions, including faculty, students, administrators and staff.

The following information responds specifically to the strategies recommended in the CSU initiative to improve degree completion.

I. Efficiency in Academic Program Design

Each academic department met last year to review their overall program requirements. Most were able to lower the total number of units required for graduation to 180 quarter units. Of the 32 degree programs (out of 111) that are above 180 units, 91% have accreditation or credential demands that must be satisfied. (See Appendix 1 for template detailing the units and accreditation and program information for each degree program requiring more than 180 quarter units.) A majority of those programs that require 180 units have less than 15 units of free electives. Although 46 of the 79 programs have less than 15 units of unrestricted electives, 6 of those programs have more than 15 units of electives, if restricted electives are also considered. This year, departments will review their degree requirements with the goal of increasing the number of electives (see recommended action item below).

Recommended Actions

- Programs will review sections of their requirements, including general education requirements and restricted and unrestricted (free) electives, to assess the potential to increase the number of units that may satisfy both the major and general education and to increase the number of electives through conversion of major requirements to restricted or unrestricted electives. Changes are due by March 15, 2006 to meet catalog and other publication deadlines. (I.1,2)
- Programs with over 180 units to degree will review their requirements to assess the potential to decrease the number of units to degree. Changes are due by March 15, 2006 to meet catalog and other publication deadlines. (I.1)
- The General Education Subcommittee of the Academic Senate will consider a reform of the general education requirements, including separate tracks for technical and non-technical majors. Completion is expected by spring 2007. (I.2)

II. Supporting Students in Choosing an Efficient Pathway to the Baccalaureate

The University offers many venues to help students to identify and clarify their education and career goals. This process begins before admission through pre-admission counseling

provided by the Office of Admissions and Outreach and at events such as Preview Day and Showcase of Excellence. Enrollment Services and the academic colleges have initiated an increased marketing effort for prospective students and their families to attract students with the potential to succeed and for whom Cal Poly Pomona is the right fit. These efforts will include information to assist the students in their choice of major.

At the college level, the Collins School of Hospitality Management has developed the "Collins Connection", an opportunity for prospective students and their parents to meet with advisory board members. Two departments in the College of Agriculture, Horticulture/Plant Science and Apparel Merchandising and Management, invite high school and community college students to campus to meet with faculty and industry leaders. The College of Engineering sponsors an Open House attended by 2000+ individuals who have the opportunity to talk to faculty, current students, and recent alumni, and to visit the classrooms and laboratories.

Orientation is mandatory for both freshmen and transfer students and includes a specific session for students and parents on graduation, sharing information on Cal Poly Pomona's Four Year Pledge Program and the Cultural Graduation Celebrations which recognize the achievements and contributions of graduates of all backgrounds. BroncoFusion, a welcome event of workshops and engagement activities at the beginning of each academic year, provides education and tools to support student success. Students have the opportunity to meet with faculty from their department at both of these events. In addition, programs such as Summer Bridge and the Summer Rise Program offer intensive summer experiences for entering students prior to their first term of enrollment. These programs reinforce student academic success/graduation and focus on goal setting, decision making, course selection and study/life skills. The Career Center provides one-day Career Orientation Workshops to entering students prior to their first term of enrollment with a focus on developing a timeline to achieve their career and/or professional/graduate school goals. New Student Welcome Receptions are hosted by Student Support and Equity Programs with an emphasis on goal setting.

To support an early choice of major, undeclared freshmen must declare their choice of major by the end of their third quarter and transfer students are required to declare a major upon admission. Student Support and Equity Programs provides peer tutoring, mandatory advisement at least three times a quarter, a First Year Experience Course, College Success Seminars and Major/Career Exploration Workshops for undeclared and EOP students as well as targeted sessions for Renaissance Scholars (former foster youth).

Throughout their educational career at Cal Poly Pomona, students have access to career information and activities through the Career Center and University electronic materials. BroncoCompass, a comprehensive advising website for students and advisors, was released to the campus in September 2005 and provides connections to career and major choice information. The campus in September 2005 initiated BroncoBytes, a weekly e-mail bulletin for students that offers timely access to campus information and activities and assists the students in staying on track with important deadlines and processes. Activities offered by the Career Center during the academic year include a Career Success

Conference, Career Fairs, Disciplinary Days, class presentations, choice and change of major workshops, on campus interviews, “How to Prep” workshops, and self assessment tools. In addition, the Cultural Centers offer a GRAD Center that serves as a resource to students for the possibilities available after graduation, including resources for graduate school applications and entrance exams.

The Student Development and Leadership Institute (SDLI) sponsored by the Office of Student Life provides education, development and training that enhances students' personal leadership abilities for lifelong learning and success in a changing, multicultural world. SDLI provides innovative and practical programs and workshops that encourage clarification of life and career goals and consists of four programs: 1) Leadership Workshop Series, 2) Council Transition Retreat, 3) Co-curricular Portfolio, and 4) 3D Leadership Conference.

The Disability Resource Center (DRC) promotes the value of efficient progress towards degree completion for students with disabilities through efforts to encourage students to consider the impact of disability, utilization of different types of accommodations and services and curricular requirements in the development of effective academic/study plans. DRC partners with community entities that focus on career outreach related opportunities for students with disabilities. ARCHES, a TRIO Student Services Program, offers comprehensive advising and major, graduate school and career exploration assistance.

The departments and colleges have links to websites and professional organizations offering career information related to their programs. The Collins School of Hospitality Management, the College of Agriculture, and the College of Environmental Design have made a particular effort to help students identify careers in their respective fields. The Collins School created the role of student services coordinator to work with industry recruiters. All three colleges/schools sponsor all-college Career Days, partnered with the Career Center, and supported by their student groups. The Collins School and Environmental Design also sponsor lecture series that allows industry executives, professional practitioners, and scholars to share their achievements and goals, and to meet informally with students. Students in the Collins School are required to complete a minimum of 800 hours of work experience prior to graduation, those in the College of Business all complete a senior project, and the studio experience in Environmental Design culminates with a review by jury that includes professional practitioners.

Recommended Actions

- The BroncoCompass Implementation Team will assist the departments and colleges to increase the visibility of career information that has been developed. The next phase of this initiative is expected to be completed by June 2006. (II.3)
- The campus is continuing to expand opportunities within a first year experience context. The campus will build consensus for common learning outcomes for first year experience programs to provide direction and consistency among programs for different cohorts by March 2006. (II.4)

- Each of the colleges will develop and enhance their existing First Year Experience Programs for fall 2006. One objective of these programs is to educate students about post-baccalaureate opportunities. (II.4,6)
- The Orientation Advisory Board will assess the program content of the orientation sessions and make recommendations for increasing the emphasis on graduation by January 31 for implementation in spring 2006. (II.3)
- The Career Center is currently evaluating the implementation of new strategies to assist students in exploring majors/careers, with a proposed implementation in the 2006-07 year. (II.4,5,6)

III. Tools to Keep Students on Efficient Pathways to the Baccalaureate

The campus has provided academic departments with quarterly class demand reports and summary comparisons of offered courses as an initial step in assessing student demand. An analysis of bottleneck courses is in progress.

The campus is engaged in system-wide conversations with CMS about enhancements to the current Academic Advisement Reports (degree audits) and new development of individual study plans to assist students in mapping out remaining coursework and to inform course scheduling. While CMS continues to develop a CMS-based student study plan, students in the Collins School already complete an individual study plan on entry. The plan is revised each year with their advisor. The courses for the coming year are used to provide baseline information for scheduling. Undergraduate Studies will study the possibility of expanding this exemplar project, moving the study plan online so that it is more accessible to students and advisors in all programs.

A uniform graphical display for academic program roadmaps has been developed. A similar effort is in progress for two-year schedules. These advising tools will be posted on the Undergraduate Studies website with the curriculum sheets. BroncoCompass will have links to all of these tools. The Liberal Studies Department has advanced the concept of the Lower Division Transfer Pattern Project and has prepared curriculum sheets for the thirteen main feeder community colleges that combine the courses that the students may take at the community colleges and the courses that may be taken at Cal Poly Pomona after transfer.

Several programs are in place to support student success in courses and major programs, including support for special cohorts. Departments offer courses for their first and second year students to help their transition to Cal Poly Pomona and their continued progress. Those courses include AG 100 – Orientation to the College of Agriculture, EGR 111/A – Engineering Career Exploration and EGR 210 – Engineering Orientation for Transfer Students, BUS 112 – Success Strategies for Business Majors, SCI 110/A – Success in Science, BIO 207 – Careers in Biology, and CPU 102 – Fundamental Principles of Learning Skills. The Learning Resource Center (LRC) assists students to acquire knowledge by imparting a variety of basic intellectual skills and habits and to become more independent, self-confident and effective learners. The LRC offers ASI University-Wide

Peer to Peer Tutoring by appointment to over 1000 students each year and assists almost 400 students to prepare for tests for undergraduate and post-graduate education. In addition, they support prospective and current students in federally funded programs such as College Reading Skills, Upward Bound and the McNair Scholars program. The focus of University Writing Center (UWC) is to improve the writing skills of all students, regardless of level or major. The UWC offers a variety of services to more than 2000 students a year, ranging from workshops for students in developmental English, to tutoring for students working on an essay or a research paper, to preparation for the Graduation Writing Test. Tutoring services are offered in-person, online, and by fax.

The Mathematics and Statistics Department delivers its remedial mathematics in a variety of modes to meet the various learning needs of its students. There is traditional lecture, a hybrid of online and small group instruction, group workshops, tutoring, and online supplemental material. The Department also offers tutoring through its Mathematics Student Help Center (MaSH) to individuals and small groups, recording approximately 2000 visits per quarter. The Economics Department has developed a set of computer based learning modules for use in Microeconomics. The College of Business regularly funds department initiatives to offer tutoring for classes known to be challenging.

E-learning has become a significant aspect of the student learning experience at Cal Poly Pomona. With over one hundred hybrid courses and more than twenty-five courses offered fully online, the university is using technology to offer an increasing number of classes to students who wish to receive some of their education without attending all of their classes on campus. More than half of the faculty at Cal Poly Pomona use a learning management system (LMS) for at least one of the classes they teach. At least three-quarters of all students each term are enrolled in a course using an LMS to augment learning. E-learning has made collaborative learning more feasible for many students at a campus such as Cal Poly Pomona which has a commuting student population, most of whom work at least halftime.

The campus through the Environment Management Advisory Council (EMAC) has initiated a review and benchmarking of policies, enforcement and documentation of drops, withdrawals, grades of incompletes, and course repeats. Recommendations from EMAC will be forwarded to the Academic Senate or appropriate decision-making body following consultation with the campus community.

Recommended Actions

- Enrollment Services will continue to participate in system-wide planning efforts for CMS enhancements to support timely degree progress. (III.9,10)
- The campus will continue to enhance course scheduling reporting and assessment. Reports are being developed that will help to identify bottleneck courses by determining those courses that are prerequisite to a large number of other courses, those courses that have a high demand that is frequently unmet, and those courses that have a high failure rate or are repeated often. (III.8)

- Undergraduate Studies will investigate the feasibility of a web-based form to allow students to enter an individualized study plan for the next academic year. The course information from the plan will be stored on a database that will be available to departments to help in schedule planning for that year. The roll-out of this new process is planned for spring 2006. (III.9,10)
- All roadmaps will be posted on the Undergraduate Studies website by the end of the winter 2006 quarter. (III.7)
- Undergraduate Studies will develop a uniform graphical display for two-year schedules, and post them on its website by the end of the winter 2006 quarter. (III.8)
- Disability Resource Center will utilize training for referral of services from other related departments, beginning April 2006. In addition, DRC will explore the feasibility of providing learning assessments for students experiencing academic difficulties in making efficient progress toward the degree by June 2006. (III.11)
- The Enrollment Management Advisory Council (EMAC) Remediation Subcommittee will collect information on alternative forms of delivery of material to support students in preparatory math and English with recommendations to be made in spring 2006. (III.11)
- The campus will participate in the efforts of the CSU Statewide Senate to convene disciplinary groups of faculty to evaluate and recommend academic technology-based support programs. (III.11)
- The University Writing Center is developing a computer-based program, the Calibrated Peer Review, to assist students who have failed the Graduation Writing Test multiple times. Students prepare essays and evaluate other students' essays online. The program is being piloted in the fall 2005 quarter, and will be a regular offering by spring 2006. (III.11)
- The campus is currently developing a program to enhance the sustainability of online offerings in order to meet the growing demand for online courses. The program seeks to ensure that online offerings of high-demand and bottleneck courses are consistently available. To ensure that these courses are both sustainable over time and of high quality, the university will fund teams of faculty to develop such courses for hybrid or online delivery during the 2006-07 academic year. (III.11)
- The Enrollment Management Advisory Council (EMAC) Academic Quality Subcommittee will review the enforcement of campus policies related to drops and withdrawals. They will benchmark campus policies related to repeats, grade forgiveness, and incompletes with the policies at other CSU campuses. Recommendations for a referral to the Executive Committee of the Academic Senate will be presented to the EMAC Executive Committee in the winter and spring quarters of 2006. Revised policies will be approved for implementation in the 2006-07 year. (III.13)
- Each college will review their policies and procedures regarding the processing of petitions before fall 2006. The College of Science reviewed their procedures in fall

2005; the College of Letters, Arts, and Social Sciences will review their procedures in winter 2006. (III.12)

IV. Strong Advising Strategies and Practices

The PeopleSoft CMS implementation has changed the manner in which advisors and students view and utilize information for advising purposes. Training and ongoing enhancements are required to maximize the functionality of PeopleSoft. The University Advising Task Force, Undergraduate Studies and Enrollment Services provide workshops to faculty and staff to enhance academic advising. These efforts will be expanded to address the many changes that resulted from the PeopleSoft CMS implementation.

With the conversion to PeopleSoft, the implementation of a campus-wide automated degree audit system was transitioned from the DARS Program to the Academic Advising and Transcript Credit modules in PeopleSoft. Implementation of these modules for all majors in the College of Business Administration and the Collins School of Hospitality Management will be completed in December 2005. The College of Engineering is included in Phase II of the implementation project with an anticipated completion date of spring 2006.

Since the fall 2004 quarter, transfer credit evaluations have been provided for all entering transfers. Academic advisement reports and transfer credit evaluations are available online for these students and their advisors. In addition, all administrative and academic departments have online access to imaged academic transcripts and other academic documents needed for advisement. Deficiency screens have been developed as a bolt-on to Peoplesoft so that evaluators and trained advisors have online access to information concerning outstanding requirements for graduation.

All students receive advising in their academic departments before the beginning of their first term at (mandatory) orientation. In addition, some academic colleges require students to attend a choice of major advising sessions prior to approval of changes of major. Advising for undeclared and EOP students is provided by Student Support and Equity Programs and includes the use of advising portfolios, peer mentoring, and a three-session advising program.

More than half of the academic departments apply holds on their majors' registration one or more times per year to ensure that the students receive strong major advisement. This advisement is shared by all of the tenure track and tenured faculty in most departments, although advising for identified cohorts such as at-risk (students with GPA below 2.2) and four year pledge students is assigned to particular individuals in almost two-thirds of the departments. The College of Engineering has set up a website where students can enter their ID and obtain their advisor's name, phone, and location.

Many departments use email and the web to communicate policies, deadlines, and academic and career opportunities to their advisees. Several departments supplement this effort with handbooks and worksheets. The College of Agriculture, in particular, publishes

an electronic newsletter for faculty and staff, “Ag News Bytes”, to address topics such as scholarships, internships, deadlines, and coming events. Assessment of advising is beginning this year. Several departments use senior exit interviews to assess their advising efforts. Both the Art Department and the Biological Sciences Department have developed an advising handbook for students. Biological Sciences also has a manual for faculty advisors. The College of Business Administration and the College of Engineering hold advising workshops several times each year to help their faculty and staff understand current issues and share best practices.

The Collins School of Hospitality Management created an academic advisor position to ensure that the advising process is more personal and consistent. In addition to general responsibilities, this advisor writes to students who fail the GWT and to students with GPA's of 3.25 or greater. The College of Agriculture also maintains a Recruitment and Retention Office. Pre-professional advising is offered to all students by faculty within the academic colleges.

In the 2000-01 year, the campus was proactive in implementing mandatory advising for students in good standing but considered “at-risk” (those with a GPA below 2.2). This policy places a registration hold on students with a GPA below 2.2 and requires the student to meet with an advisor to have the hold removed and encourages the advisor to prepare an advising contract with the student.

The campus supports the goal to provide intrusive advisement when a student exceeds the number of units required for a degree. Punitive actions will need to be considered with care so that transfer students are not adversely affected. After the Lower Division Transfer Pattern Program has been successfully implemented, such actions may be more effectively directed to the students who require such intervention.

The Assessment of Advising Subcommittee of the University Advising Task Force and four department chairs have initiated a year-long project to introduce, design and pilot an assessment of advising process for Cal Poly Pomona. This endeavor seeks to engage chairs and lead advisors to create a flexible, yet systematic approach to the assessment of advising for the Cal Poly Pomona community, create a set of core process/delivery and student learning outcomes that can be assessed across all advising programs (with departments adding program specific outcomes to meet unique interests) and to implement a cycle for this assessment. Following an October 21 consultation facilitated by the National Academic Advising Association (NACADA), a 14-member team will attend the NACADA Assessment of Advising Institute in February 2006 to draft assessment measures based on shared outcomes.

Recommended Actions

- An ongoing training plan on CMS functions and resources for advisors and students will be expanded by December 2005 and communicated to the campus in January 2006. (IV. 14)

- A preliminary timeline to implement the CMS Academic Advisement and Transcript Credit Modules for all other undergraduate major programs was presented to the academic colleges in November 2005 and will be updated quarterly. (IV. 15)
- When totally implemented, degree audits will be available from point of enrollment. The campus will review the feasibility of an informational service indicator in the CMS system which will require or strongly recommend advising at the junior level for fall 2006. (IV. 16,17)
- CMS provides students with the ability to generate a what-if advising report based on alternative majors. This report accompanied by an individualized degree plan would give a student valuable information concerning the feasibility of changing a major. This advising tool will be implemented coincidental with the development of the Academic Advisement Reports and the study plans. (IV.15)
- The Enrollment Management Advisory Council (EMAC) Academic Quality Subcommittee will review the graduation check and application process, timeline, and efficiency. Consultation with the campus community will take place early in the winter quarter and recommendations will be forwarded by March 2006 to the appropriate decision-making body for action. (IV.16,18)
 - In the interim, the Registrar's Office will develop a system to systematically notify advisors of receipt and processing of graduation checks/applications by spring 2006. (IV.16,18)
- Following attendance of a fourteen-member team at the NACADA Assessment of Advising Institute in February 2006, core outcomes and multiple measures will be shared with department chairs and lead advisors in spring 2006. (IV.14, 16)
- A Task Force will be formed including the AVP for Faculty Affairs, a Dean, a Department Chair, and several faculty to discuss recognition of and compensation for the advising workload. The Task Force will begin work in the spring 2006 quarter, using information from the Assessment of Advising group. (IV.15)
- Each college will review their advising practices to assess the need for more intrusive advising. (IV.15)
 - The Collins School will lead the University with a pilot program in the winter 2006 quarter to require quarterly advising for students with excess units.
 - The College of Letters, Arts, and Social Sciences will require mandatory advising at least once a year for all majors by spring 2006.
- Informational service indicators will be applied to students' academic records to encourage them to meet with their advisor upon attainment of 105 quarter units, and upon attainment of 180 quarter units. The Advising Task Force will evaluate the feasibility of setting a registration hold for students with excess units to obtain advising by spring 2006 (IV. 17,18)

V. Campus Monitoring and Feedback

The campus is supportive of system-wide efforts to deliver a CMS-based option for dashboard development and monitoring of key success factors. In addition to individual degree plans and course demand and scheduling analysis currently under discussion, the proposed CMS-based data warehousing environment would provide the ability for the campus to use summary dashboard indicators to monitor the progress and needs of the students within departments and inform planning at the department level. The ability to drill down to individual students and the ability to aggregate data at the university level are essential components of this proposal.

The campus has begun a prioritization and recovery process that requires accessible and understandable data to assist in the evaluation of program effectiveness. While there are several reports in place to support this process, an expanded development of dashboard indicators measuring such factors as stop-outs, academic standing, persistence, and excess units would benefit the effort.

It is important to note that Cal Poly Pomona is a beta campus for the Student Administration Data Warehouse Project and there is considerable concern about a potential loss of the quality of reporting that has been enjoyed in the past. The transition to a new data warehouse environment will be a significant challenge because of the tremendous campus reliance on current internal efforts to build a strong data warehouse and reporting engine.

Recommended Actions

- The campus administration will work with the academic colleges to determine and prioritize the key student success indicators to be included in the development of additional dashboards. This prioritization will be done by March 2006 and will be inclusive of the recommendations of the Prioritization and Recovery Committee. (V.19)
- A proposal for a new Data Warehouse model will be forwarded to the Web-IT Governance Committee by January 2006. (V.19)
- The campus will participate with peers from sister CSU campuses to discuss the campus' efforts to facilitate graduation. There are several qualified faculty and administrators who will be recommended to be members of the visiting teams. (V.20)

VI. Assuring the Priority of Facilitating Graduation

The campus is committed to ensuring both the efficiency *and* effectiveness of pathways to graduation. The campus continues ongoing discussions to clearly articulate and support university-level learning outcomes.

The President's Cabinet is providing oversight for this initiative and will help to ensure that progress is ongoing and that resources are appropriately allocated. The campus

Prioritization and Recovery initiative will also inform the allocation of new funding as well as the potential redirection of existing funding.

Recommended Actions

- The President will be provided with periodic reports of the campus' progress to share with the Chancellor and the Board of Trustees beginning immediately. (VI.21)
- The campus initiatives to facilitate graduation will be considered in determining funding priorities, beginning with the current 2005-06 academic year. (VI.22)
- The campus will identify projects to propose to the Chancellor's Office for one-time funding beginning with the current 2005-06 academic year. (VI.22)

**Action Plan Template
Programs over 180 Units**

Note: Total Units = Major + General Education + Unrestricted Electives - Double Counted
Major Units = Core Units + Support Units + Restricted Elective Units

Major	Major Units			Total Major Units	General Education	Double Counted	Unrestricted Electives Units	Total Units	Accredite
	Core Units	Support Units	Restricted Elective Units						
Agriculture									
Agricultural Biology	68	23	42	133	68	12	5	194	No
Agronomy : Option/Emphasis (Sub-Plan) Crop Production	68	16	48	132	68	8	2	194	No
Agronomy : Option/Emphasis (Sub-Plan) Crop Science	68	28	38	134	68	12	4	194	No
Animal Science : Option/Emphasis (Sub-Plan) Pre Veterinary Graduate School	60	77	0	137	68	24	0	181	No
Horticulture : Option/Emphasis (Sub-Plan) Fruit Industries	68	24	40	132	68	8	2	194	No
Horticulture : Option/Emphasis (Sub-Plan) Ornamental Horticulture	67	26	41	134	68	8	0	194	No
Landscape Irrigation Science	68	30	26	124	68	8	10	194	No
Soil Science	76	57	0	133	68	8	1	194	No
Business Administration									
Accounting	100	16	0	116	68	12	16	188	Yes
Computer Information Systems	102	16	0	118	68	8	8	186	Yes
International Business	94	12	8	114	68	8	12	186	Yes
Education and Integrative Studies									
Liberal Studies : Option/Emphasis (Sub-Plan) Blended BA Credential	97	91	0	188	68	56	0	200	CCTC Appr
Liberal Studies : Option/Emphasis (Sub-Plan) Blended BCLAD BA Credential	97	91	0	188	68	56	0	200	CCTC Appr
Gender, Ethnicity and Multicultural Studies : Option/Emphasis (Sub-Plan) Blended BA/Credential	112	66	0	178	68	44	0	202	CCTC Appr
Gender, Ethnicity and Multicultural Studies : Option/Emphasis (Sub-Plan) Blended BCLAD BA/Credential	112	64	0	176	68	44	0	200	CCTC Appr

**Action Plan Template
Programs over 180 Units**

Major	Major Units			Total Major Units	General Education	Double Counted	Unrestricted Electives Units	Total Units	Accredited
	Core Units	Support Units	Restricted Elective Units						
Engineering									
Aerospace Engineering	68	79	0	147	68	29	12	198	Yes
Chemical Engineering	62	81	0	143	68	17	4	198	Yes
Civil Engineering : Option/Emphasis (Sub-Plan) General Civil Engineering	86	62	0	148	68	29	11	198	Yes
Civil Engineering : Option/Emphasis (Sub-Plan) Environmental Engineering	94	62	0	156	68	29	3	198	Yes
Civil Engineering : Option/Emphasis (Sub-Plan) Geospatial Engineering	97	62	0	159	68	29	0	198	Yes
Computer Engineering	9	58	0	67	68	29	3	198	Yes
Construction Engineering Technology	88	43	0	131	68	13	12	198	Yes
Electrical Engineering	98	61	0	159	68	29	0	198	Yes
Engineering Technology : Option/Emphasis (Sub-Plan) Mechanical/Manufacturing	75	32	0	107	68	13	36	198	Yes
Electronics and Computer Engineering Technology	80	44	0	124	68	13	19	198	Yes
Industrial Engineering	59	82	0	141	68	21	10	198	Yes
Manufacturing Engineering	72	76	0	148	68	21	3	198	Yes
Mechanical Engineering	103	54	0	157	68	40	13	198	Yes
Environmental Design									
Architecture	152	16	0	168	68	0	10	246	Yes
Landscape Architecture	99	18	14	131	68	8	4	195	Yes

**Action Plan Template
Programs over 180 Units**

Major	Major Units			Total Major Units	General Education	Double Counted	Unrestricted Electives Units	Total Units	Accredite
	Core Units	Support Units	Restricted Elective Units						
Letters, Arts, and Social Sciences									
Music : Option/Emphasis (Sub-Plan) Interdisciplinary Studies in Music	58	60	0	118	68	0	0	186	No
Science									
Biotechnology	104	12	0	116	68	0	0	184	No