University of Pittsburgh
School of Engineering

3-2 Agreement
with

California University of Pennsylvania
Clarion University of Pennsylvania
Edinboro University of Pennsylvania
Gannon University
Indiana University of Pennsylvania
Allegheny University
Chatham College
Duquesne University
Seton Hill College
St. Francis College
St. Vincent College
Thiel College

June 28, 2000

See: http://puccini.che.pitt.edu/rulebook/articulation_list.html
For Details
Overview of Program
The purpose of this document is to formal establish a “3-2” agreement between the University of Pittsburgh School of Engineering and Participating College. A “3-2” joint degree program enables a student enrolled in a liberal arts college to receive a second degree in engineering. The student is able to do this by undertaking a structured program at the liberal arts college during the first three years and then transferring to the University of Pittsburgh School of Engineering for the last two years. The first three years will typically include the general education requirements for the liberal arts degree, specific mathematics, chemistry, physics and engineering science courses required for all engineering degrees and, where possible, certain preparatory courses for the student’s chosen engineering major. A quality point average of 2.8 or better and recommendation from the student’s academic adviser or 3/2 program director is generally required for direct admission into the chosen engineering program. In addition to completing the requirements for an engineering degree during the last two years, through careful course selection the student should also satisfy the requirements for the liberal arts degree. For certain engineering departments, students may need to attend the School of Engineering during one summer term.

Introduction
This agreement specifies the terms by which the University of Pittsburgh and Participating College agree to cooperate in facilitating the transfer of students to pursue dual baccalaureate degrees from Participating College and the University of Pittsburgh School of Engineering.

The 3/2 engineering program between Participating College and the University of Pittsburgh will normally consist of three years of instruction at Participating College followed by two years of instruction at the University of Pittsburgh. Depending on the preparation of the student, certain engineering degree programs may require Summer Term attendance prior to the student’s first Fall term at the University of Pittsburgh. Provided that all stipulated criteria have been met, the student will receive a liberal arts degree from Participating College and a Bachelor of Science in Engineering degree from the University of Pittsburgh.

The School of Engineering offers under B.S. degrees in Bioengineering, Chemical Engineering, Civil and Environmental Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Industrial Engineering, Materials Science and Engineering, and Mechanical Engineering. Appropriate syllabi will be developed for those degree programs of interest to Participating College. Students from Participating College who will be transferring to the University of Pittsburgh as part of this agreement will also be eligible to participate in the School’s other education enhancement programs including the Cooperative Education Program and the Engineering Study Abroad Program. Students may also choose to pursue either a minor or certificate in another engineering or arts and sciences area. Participation in these optional programs may require additional time to graduate. Interested students should consult the University of Pittsburgh Undergraduate Bulletin for more information. (See http://www.univ-relations.pitt.edu/bulletins/undergrad/index.html).

Any and all modifications of this document must occur through formal notification and revision of this agreement.
Recruitment
The availability of the 3/2 program between Participating College and the University of Pittsburgh School of Engineering will be included in literature developed and distributed by both institutions. Participating College is encouraged to develop brochures and other suitable material outlining the course content and the features of this program. Such information concerning the program may be distributed through Participating College’s Office of Admissions. Participating College will be primarily responsible for student recruitment for this 3/2 Program. As required, the appropriate School of Engineering faculty and staff will be available by telephone and e-mail to assist Participating College students, faculty and staff.

All descriptive literature, promotional material or advertising material developed by Participating College describing or discussing this Program should be submitted to the Associate Dean for Academic Affairs at the University of Pittsburgh School of Engineering for review and approval prior to publication and distribution. Written approval by the University of Pittsburgh for such material and literature will not be unreasonably delayed.

Application for Admission
Students admitted to this program should have a strong background in science and mathematics in order to be competitive for transfer to the University of Pittsburgh. They should complete the prerequisite courses as outlined in the attached course listing at Participating College during their first three years at Participating College in order to be able to complete the University of Pittsburgh course work in the prescribed time.

A transfer application for admission should be requested from:

The Office of Admissions and Financial Aid
4227 Fifth Avenue
Pittsburgh, PA 15213
(412) 624-PITT

or on-line from http://www.pitt.edu/~oafa/transfer.html

Additional information may be found at http://www.pitt.edu/~oafa/oafa.html

Completed application materials must indicate that the student is following the terms of the Participating College/University of Pittsburgh articulation agreement and must be submitted by July 15 for consideration for Fall semester admission, November 15 for Spring admission and March 15 for Summer admission. A recommendation from the Participating College 3/2 Program Adviser is also required.

Ideally, the student should indicate interest in the program during his/her first year at Participating College. He/she should consult with the 3/2 Program Advisor to make sure that the appropriate courses are taken. During the student’s second year, the Participating College 3/2 Program Advisor should inform the School of Engineering of the student’s intent to transfer and indicate the engineering program of interest.

Candidate Selection
The School of Engineering agrees to review in an expeditious and non-prejudicial manner those students who follow the 3/2 agreement between Participating College and the University of Pittsburgh.

To be considered for transfer, students must have a minimum cumulative Quality Point Average (QPA) of 2.50 (based on a 4.00 scale). Students who have earned a 2.8 QPA or better, completed the required courses and have been recommended by the Program Adviser will be able to transfer directly into the School of Engineering Program of their choice. The University of Pittsburgh will accept up to 90 credits for transfer. A grade of “C” or better must be earned in the approved courses (See Curriculum) in order to receive transfer credit. Courses in which a grade of C- or lower was received will not be counted for transfer credit.

Statute of Limitations
All course work must be completed within the 12-year statute of limitations for the University of Pittsburgh.

Course Selection
Transfer courses equivalent to the School of Engineering’s freshman year of studies will include as a minimum those from the attached list (See Curriculum). Additional upper-level courses approved for transfer are listed by program (see Curriculum). The provisions and contents of this document are subject to change at any time at the University’s sole discretion. The University of Pittsburgh will make reasonable efforts to allow students already in the 3-2 program at the time changes are made, to complete the program under the conditions in effect at the time of their enrollment in the 3/2 program.

Advising Services
Participating College’s appropriate advisors and associated faculty will advise students during the first three years. Students may also contact the Freshman Program Office or the appropriate undergraduate program coordinator.

Student Services
Students transferring from a 3/2 program to the University of Pittsburgh School of Engineering will be treated on an equal basis with native students with regard to selection of courses and other student services. The 3/2 transfer students will be treated as first time students for the purpose of obtaining campus housing. Campus housing for the first two years at Pitt is guaranteed provided the students has met the May 1st deposit deadline.

Terms of the Agreement
The 3/2 liaisons from both institutions will review this agreement annually, revising it if necessary. An extensive review will take place five years from the date of signing. Attachments regarding curriculum requirements should be reviewed as required.

Lacking such a review, the agreement will continue until either the Dean of Participating College or the Dean of the School of Engineering receives written notification of termination. Students enrolled in this program at the time of termination shall be allowed to proceed according to the policies outlined previously in this agreement.

See http://puccini.che.pitt.edu/rulebook/articulation_list.html for specific details.
Degree Requirements for the School of Engineering at the University of Pittsburgh

Freshman Year (All Engineering Programs)

<table>
<thead>
<tr>
<th>FIRST TERM</th>
<th>Cr.</th>
</tr>
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<tbody>
<tr>
<td>MATH 0220 Analytic Geometry and Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 0960 General Chemistry for Engineers 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 0104 Basic Physics for Science and Engineering 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0011 Introduction to Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Humanities or Social Science elective*</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0081 Freshman Seminar</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SECOND TERM</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>MATH 0230 Analytic Geometry and Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 0970 General Chemistry for Engineers 2</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 0105 Basic Physics for Science and Engineering 2</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0012 Introduction to Engineering Computing</td>
<td>3</td>
</tr>
<tr>
<td>Humanities or Social Science elective*</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0082 Freshman Seminar</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

* Engineering students must complete a total of six approved humanities and social science electives. Two of these electives must be from two different humanities areas; and two must be from two different social science departments. One elective must be an upper-level humanity or social science in an area where a student has already taken a lower level course. At least one humanity or social science elective must include an extensive writing component – W courses.

Sophomore through Senior Years

Required of all Programs:

| PHYS 0106 Basic Physics for Science and Engineering 3 | 3 |
| MATH 0240 Analytical Geometry and Calculus 3 | 4 |
| MATH 0250 Matrix Theory and Differential Equations | 4 |

Remainder of course requirements for the sophomore through senior years depend on the student’s engineering program selection. More detailed information for individual program course requirements can be found on the School of Engineering webpage at http://www.engrng.pitt.edu/~engwww/.
### Equivalent courses offered at Participating College
To be developed by each program in conjunction with the School of Engineering

#### Example

<table>
<thead>
<tr>
<th>Participating College</th>
<th>School of Engineering,</th>
</tr>
</thead>
<tbody>
<tr>
<td>No equivalent; not required of transfer students</td>
<td>ENGR 0081 Freshman Seminar</td>
</tr>
<tr>
<td>No equivalent; not required of transfer students</td>
<td>ENGR 0082 Freshman Seminar</td>
</tr>
<tr>
<td>General Chemistry 1 (lab not required)</td>
<td>CHEM 0960 General Chemistry for Engineers 1</td>
</tr>
<tr>
<td>General Chemistry 2 (lab required)</td>
<td>CHEM 0970 General Chemistry for Engineers 2</td>
</tr>
<tr>
<td>No equivalent (replace with technical elective)</td>
<td>ENGR 0011 Introduction to Engineering Analysis</td>
</tr>
<tr>
<td>Computer Program Course</td>
<td>ENGR 0012 Introduction to Engineering Computing</td>
</tr>
<tr>
<td>Calculus 1</td>
<td>MATH 0220 Analytic Geometry and Calculus 1</td>
</tr>
<tr>
<td>Calculus 2</td>
<td>MATH 0230 Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>Physics for Math and Science 1 (no lab required)</td>
<td>PHYS 0104 Basic Physics for Science &amp; Engineerir</td>
</tr>
<tr>
<td>Physics for Math and Science 2 (no lab required)</td>
<td>PHYS 0105 Basic Physics for Science &amp; Engineerir II</td>
</tr>
</tbody>
</table>

#### Sophomore Year Courses

| Calculus 3                                                                            | MATH 0240 Analytic Geometry and Calculus 3    |
| Differential Equations                                                               | MATH 0250 Matrix Theory and Differential Equations |
| Linear Algebra                                                                        |                                             |
| Physics for Math and Science 3 (no lab required)                                      | PHYS 0106 Basic Physics for Science & Engineerir |

#### Other Possible Matches

**Bioengineering**
- BIOSCI 0150 Foundations of Biology 1
- BIOSCI 0160 Foundations of Biology 2
- BIOSCI 1000: Introduction to Biochemistry
- CHEM 0310 Organic Chemistry 1 and CHEM 0330 Organic Chemistry Laboratory
- CHEM 320 Organic Chemistry 2
- CHEM 340 Organic Chemistry Lab 2
- ENGR 0013: Statics and Particle Dynamics
ENGR 0014: Mechanics of Materials
ENGR 20 Probability and Statistics for Engineers 1

**Chemical and Petroleum Engineering**
CHEM 0310 Organic Chemistry 1 and
CHEM 0330 Organic Chemistry Laboratory
CHEM 320 Organic Chemistry 2
CHEM 340 Organic Chemistry Lab 2
CHEM 1410 Physical Chemistry 2
CHEM 1480 and 1440 Physical Chemistry 1
CHEM 1430 Physical Chemistry Lab
ENGR 20 Probability and Statistics for Engineers 1
ENGR 0013: Statics and Particle Dynamics

**Civil and Environmental Engineering**
ECON 0100: Introduction to Microeconomic Theory
ENGR 0013: Statics and Particle Dynamics
ENGR 0014: Mechanics of Materials
ENGR 20 Probability and Statistics for Engineers 1

**Computer Engineering**
EE/CoE 0132 Digital Logic
EE/CoE 0031 Linear circuits and systems 1
COE 0445 Information Structures
COE 0142 Computer Organization
COE 1501 Data Structures and Algorithms
COE 1541 Computer Architecture
COE 1550 Operating Systems

**Electrical Engineering**
EE/CoE 0132 Digital Logic
EE/CoE 0031 Linear circuits and systems 1
EE 0142 Computer Organization
ENGR 20 Probability and Statistics for Engineers 1
ENGR 1010 Communications Skills for Engineers

**Industrial Engineering**
ENGR 20 Probability and Statistics for Engineers I
ENGR 0013: Statics and Particle Dynamics
ENGR 1010 Communications Skills for Engineers

**Materials Science**
ENGR 0013: Statics and Particle Dynamics
ENGR 0014: Mechanics of Materials
MSE 0048: Energetics 1

**Mechanical Engineering**
ENGR 0013: Statics and Particle Dynamics
ENGR 0014: Mechanics of Materials
ME 0050: Thermodynamics

**Contacts**
*For assistance with transfer admission questions:*
Contact the *Freshman Program Office*:

B80H Benedum
Pittsburgh, PA 15261
412-624-9825

*For assistance with student records questions:*
Contact the *Office of Administration*:

Betty Victor
Director
bvictor@engrng.pitt.edu
412-624-9800

Rama Bazaz
Associate Director
paurb4@vms.cis.pitt.edu
412-624-9801

*For assistance with administrative and academic questions:*
Contact the *Associate Dean’s Office*:

Larry Shuman
Associate Dean, Undergraduate Studies
shuman@engrng.pitt.edu
412-624-9814

Marcia Lasky
Secretary to the Associate Dean
assec@engrng.pitt.edu
412-624-9815

*For additional information about our institution, visit our web site(s):*
University of Pittsburgh
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http://www.pitt.edu/
### Undergraduate Coordinators

<table>
<thead>
<tr>
<th>Department</th>
<th>Undergraduate Coordinator</th>
<th>Telephone</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biotechnology &amp; Bioengineering</td>
<td>Mark Redfern</td>
<td>412-624-6445</td>
<td><a href="mailto:Redfernms@msx.upmc.edu">Redfernms@msx.upmc.edu</a></td>
</tr>
<tr>
<td>Chemical and Petroleum Engineering</td>
<td>Robert Enick</td>
<td>412-624-9649</td>
<td><a href="mailto:rme@vms.cis.pitt.edu">rme@vms.cis.pitt.edu</a></td>
</tr>
<tr>
<td>Civil and Environmental Engineering</td>
<td>Attila Sooky</td>
<td>412-624-9869</td>
<td><a href="mailto:sooky@civ.pitt.edu">sooky@civ.pitt.edu</a></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>Ron Hoelzeman</td>
<td>412-624-9676</td>
<td><a href="mailto:Hoelzema@ee.pitt.edu">Hoelzema@ee.pitt.edu</a></td>
</tr>
<tr>
<td>Engineering Physics</td>
<td>William Soffa</td>
<td>412-624-9720</td>
<td><a href="mailto:Wsoffa+@pitt.edu">Wsoffa+@pitt.edu</a></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Bob Boston</td>
<td>412-624-3244</td>
<td><a href="mailto:Boston@ee.pitt.edu">Boston@ee.pitt.edu</a></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>Jay Rajgopal</td>
<td>412-624-9840</td>
<td><a href="mailto:Rajgopal@engrng.pitt.edu">Rajgopal@engrng.pitt.edu</a></td>
</tr>
<tr>
<td>Materials Science</td>
<td>Ian Nettleship</td>
<td>412-624-9735</td>
<td><a href="mailto:nettles@engrng.pitt.edu">nettles@engrng.pitt.edu</a></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Roy Marangoni</td>
<td>412-624-9797</td>
<td><a href="mailto:maran@engrng.pitt.edu">maran@engrng.pitt.edu</a></td>
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</table>