Dual Degree Program Agreement

Butler University

and

Indiana University Purdue University Indianapolis,
IUPUI

September 1998

DUAL DEGREE PROGRAM AGREEMENT
between
BUTLER UNIVERSITY
and
INDIANA UNIVERSITY-PURDUE UNIVERSITY INDIANAPOLIS

The purpose of this Dual Degree Program Agreement is to describe a framework for students attending Butler University who concurrently participate in another academic program offered by the Purdue School of Engineering and Technology at Indiana University-Purdue University Indianapolis (IUPUI). Students who complete all academic requirements for this special program qualify for a Bachelor of Science (B.S.) degree in one of the basic sciences from Butler University and a Bachelor of Science in Engineering (B.S.E.), a Bachelor of Science in Electrical Engineering (B.S.E.E.) or a Bachelor of Science in Mechanical Engineering (B.S.M.E.) degree from Purdue University awarded at Indianapolis. The B.S.E.E. and B.S.M.E. programs are ABET (Accreditation Board for Engineering and Technology) accredited. Special admission is required. While participating in this program, students are considered to be a matriculant at both institutions.

Program Structure

Faculty members from both institutions have approved the dual degree program and list of course equivalencies identified by the specific program syllabi attached to this agreement beginning fall semester 1999-2000. These syllabi sheets detail precisely how each course will be integrated into the student's plan of study. To ensure consistency and accuracy, these documents must be periodically reviewed by representatives for both institutions to communicate and update information regarding curriculum and textbooks. Each institution will be expected to designate a key individual as its representative to manage effective communication and program planning and to serve as the day-to-day point of contact and liaison.

Satisfactory completion of the dual degree program requires meeting all academic requirements as enumerated on specially prepared curriculum guides identifying the proposed academic courses for each semester. Students are expected to reside in the Butler community throughout the entire enrollment period and as Butler residents pay the appropriate tuition and fees for that institution each term. As primary fiscal agent, Butler will also be responsible for administration and disbursal of all scholarships and/or financial aid.

Engineering courses identified for the curriculum during the first two or three years (depending upon the specific program) will be taught on the Butler University campus unless utilization of an engineering laboratory is essential for a specific course. Determination of time and location for engineering course scheduling on the Butler campus will be a joint responsibility shared by the two institutions. IUPUI will be responsible for ensuring proper coordination with the IUPUI Registrar in preparation of the IUPUI course schedule. After completion of the student's fourth semester or subsequent semester dependent upon a specific program, students will be expected to commute to the IUPUI campus for all remaining engineering courses.

Student participation in one or more required internships is an anticipated feature of the dual degree program. IUPUI will be responsible for designing and managing this curricular component including identification of internship sites and for assigning individual students to their respective internship positions. Financial assistance equivalent to one full-time staff member will be furnished by Butler University beginning with the second year of the dual degree program operation in order to allow sufficient time to manage and direct the internship component in a professional manner.

Provisions for student housing and food service will be the same as for all other students attending Butler University during the entire period of enrollment necessary to fulfill provisions of the dual degree program. Transportation will also be provided by Butler University during the academic terms when it is necessary for students to commute between the two universities.

Both universities may advertise the availability of the program. Prior agreement and consent, however, will be obtained by each institution before implementation of any advertizing or marketing strategy. This will include for example, but not be limited to, review of proposed brochures, academic bulletins, video, other electronic or print media to be employed.

Criteria for the Consortium for Urban Education (CUE) will not be applicable for this program.

Admission Procedures

Butler University will be the lead institution for identification and selection of students. All prospective students will complete an application for admission to Butler University including submission of all necessary accompanying credentials and pay the appropriate admission fee. Butler University will designate those students to be selected for admission in accord with criteria jointly approved by both institutions.

Once identified, all correspondence to qualified applicants will identify that admission has in fact been for a dual program involving two different institutions. This

correspondence will prominently identify both participating Schools.

An IUPUI admission application will not be required. Upon matriculation students who enroll in this special program will be individually identified along with necessary demographic data for completion of the IUPUI student profile. Copies of each student's secondary school transcript, plus any other academic credentials used for admission or advanced standing, will also be provided at that time.

Orientation, Advising and Registration

Students will reside at Butler University and enroll for the majority of academic course work on the Butler campus during the first year where new student orientation will be facilitated by Butler University. IUPUI, however, will ensure availability of necessary personnel to assist in planning for new orientation and registration procedures that may prove necessary for the engineering course component on the Butler campus.

IUPUI will provide engineering curricula related academic counseling for students throughout their participation in the dual degree program. Academic counselor availability will be maintained by each institution on both campuses as needed. During the fall semester for freshmen, a "batch process" enrollment procedure will be utilized by IUPUI. Thereafter, students continuing in the dual program may utilize the "touch-tone" telephone system commonly employed for all IUPUI students.

Grades, Grade Reports, and Academic Transcripts

Individual student grades will be initially reported by each faculty member in accord with procedures established by the Registrar for the institution responsible for a specific course. At the end of each term, each institution will provide individual students a Grade Report for courses completed under the auspices of that institution. Registration by each student in the dual degree program will constitute authorization for release and sharing of all academic records for official use at both institutions.

Student academic records will be consolidated between both institutions after each academic term in order to record cumulative academic progress. Each institution will maintain a complete academic transcript for students participating in the dual degree program.

Transfer Credit and/or Advanced Standing

Special provisions, from time-to-time, may be necessary if initial matriculants are admitted with advance standing and/or transfer credit. When this occurs, the following conditions apply:

a. If the criteria utilized by Butler University is the same or greater than criteria employed by the cognizant academic department at IUPUI, comparable credit will be awarded.

b. If the criteria utilized by Butler University is not equivalent to the criteria employed by the cognizant academic department at IUPUI, and the School of Engineering and Technology is still willing to accept the substitute for academic degree credit, undistributed credit will be recognized for that course.

c. The School of Engineering and Technology at IUPUI may exclude approval for any transfer or special credit course suggested for inclusion in a dual degree program by a student if the original course does not appear to meet expected academic standards.

Jurisdiction

Dual degree students will be subject to academic and disciplinary policies of both universities. Should an infraction occur in a course offered by Butler University or in violation of social policies for conduct on the Butler campus, for example, the academic regulations of Butler University will apply to these matters; reciprocally, IUPUI's student disciplinary code will apply to matters related to courses offered through IUPUI and to social conduct for matters related to IUPUI. Students are expected to complete the majority of their courses at Butler University and live in Butler University housing; accordingly Butler University will assume responsibility for most matters related to social interactions. In the case of an ambiguous or unresolved matter, the deans of students of the respective campuses will confer and recommend a resolution or decision.

Measures of Satisfactory Academic Progress

All participants in the dual degree program are considered to be simultaneously enrolled at both institutions, each semester. As a result each institution will maintain a grade point average for all courses attempted at that institution and a cumulative grade point average for all courses previously attempted at either institution.

Students will be placed on academic probation by Butler University any time the cumulative grade point average for courses attempted at Butler falls below 2.00. Excessive probation, or continued probation without improvement, can lead to a student's being declared academically ineligible.

The School of Engineering and Technology will also calculate an engineering degree Program Index for all students enrolled in the dual degree program. This program index includes all courses attempted at either Butler University or IUPUI which are required for the student's engineering degree. A dual degree student will be placed

on academic probation by the Purdue School of Engineering and Technology if his/her Program Index for any given semester is below 2.00. A dual degree student may be dismissed from the engineering degree program if his/her Program Index is below 2.00 for two (2) consecutive semesters.

Should a student be declared academically ineligible by either institution, that individual will be officially dropped from the dual degree program. In that event, the student may individually seek to continue participating in either one of the Butler University programs or one of the IUPUI programs providing his/her prior academic record is acceptable to that institution.

Tuition and Fees

Butler University will serve as the fiscal agent for collection of tuition and fees for all courses contained in the dual degree program. The following re-distribution of fees will be utilized for IUPUI:

Engineering Courses Taught on the Butler Campus: Dual degree program participants will normally be expected to matriculate and register for a series of required engineering courses to be scheduled at Butler during their freshman, sophomore and depending upon the specific program, junior year. Butler University will reimburse IUPUI at the applicable tuition, i.e., resident or non-resident, rate per credit hour for each student plus a previously agreed upon surcharge equal to 10 percent of the total amount. The IUPUI technology fee, student activity fee, and athletic development fee will be waived for all dual degree program courses scheduled on the Butler University campus.

Courses Taught on the IUPUI Campus: Dual degree program participants are expected to attend the IUPUI campus for all required engineering courses identified subsequent to the student's sixth enrollment semester. For these courses, Butler University will reimburse IUPUI at the applicable cost of attendance, i.e., resident or non-resident, rate for each student plus a previously agreed upon surcharge equal to 10 percent of the total amount. The cost of attendance rate for each dual degree program student while at the IUPUI campus will include the basic credit hour fee and any mandatory course related fee, plus applicable student technology fee, student activity fee, and athletic development fee as determined by the total number of credit hours attempted on the IUPUI campus.

Other IUPUI Fees: IUPUI also charges for other special programs and services, i.e., late program changes, late registration, locker rental, recreation, parking, etc., none of which are mandatory. These fees, when assessed, will be the individual students' responsibility.

The IUPUI Application Fee will be waived for all students admitted through

Butler University for the dual degree programs covered by this agreement.

Extra Curricular Activities

Both institutions are concerned about the total development of individual students and the opportunities to enrich life experiences outside the classroom. Although character of the two institutions differs widely, one private and one public, an extra benefit to be offered the dual degree student will be eligibility to share in the wide range of programs, activities and support services offered (except in athletics) at either institution.

Eligibility for athletic participation, however, is a special case and must be conducted in accord with provisions of the National Collegiate Athletic Association (NCAA). Prospective dual degree candidates who also contemplate participation as a member of any varsity athletics team should confer as soon as possible with a member of the athletic coaching staff.

Authorization

This agreement, including any modifications, may be reviewed by either institution upon request. *While all parties to this agreement understand its purpose is to maximize opportunities for individual students, they also recognize that limits may be placed on courses accepted under provisions of this agreement should the student subsequently decide to change to another program other than that covered by this agreement at either institution.*

This agreement will remain in effect until by mutual agreement a date is set for termination or until one party gives notice of termination to the other party at least one full calendar year in advance of the termination date. In the event of termination, both parties will work with individual students who may be enrolled to ensure the completion of their degrees to the greatest extent reasonably possible.

Review

The agreement will require continuous collaboration, review, and modification to adapt the program as circumstance and experience warrant. It is expected that the parties to the agreement will make such modifications as needed to ensure the quality and integrity of the degrees offered within the framework of this overall agreement; in such case, a new agreement need not be executed as long as the enabling agreement remains intact. Periodically, both universities will collaborate in a more substantive program review after five to seven years of operation to ensure that the agreement is meeting its objectives.

BUTLER UNIVERSITY

Steve Kaplan, Dean
College of Liberal Arts and Sciences

R. Thomas Snider, Vice President
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Geoffrey Bannister
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INDIANA UNIVERSITY PURDUE UNIVERSITY INDIANAPOLIS

Nasser Paydar, Associate Dean for Academic Programs
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William M. Plater, Executive Vice Chancellor and Dean of the Faculty

Gerald L. Bepko, Chancellor and Vice President-Indiana University

Month-Day-Year

Butler/IUPUI Dual-Degree Program in EE and Physics

Semester I	
EE 196*	3
EN 102	3
MA 106	5
Core Div I	3
CS 241	3
PE 101	1
	18

Semester II	
ID 103	3
MA 107	4
PH 201	5
SH 101	3
PE 102	1
	16

Semester III	
PH 202	5
MA 208	3
PH 351	4
ID 201	3
ECON 101	3
	18

Semester IV	
MA 334	3
ID 202	3
PH 301	3
EE 202*	3
PH 303	3
	15

Semester V	
PH 302	3
MA 315	3
Foreign Language	4
CH 105	5
	15

Semester VI	
Foreign Language	4
EE 255*	3
EE 208*	1
CH 106	5
EE 301*	3
	16

Semester VII	
EE 311*	3
Foreign Language	3
EE 302*	3
EE 266*	3
ME 200*	3
EE 267*	1
	16

Semester VIII	
Foreign Language	3
EE 362*	4
EE Elective*	3
EE Elective*	3
EE 382*	3
	16

Semester IX	
EE 305*	3
EE Elective*	3
EE 444*	3
PH 321	3
EE 400*	1
Div. 2 Elective	3
	16

Semester X	
EE 401*	1
EE 492*	3
EE Elective*	3
EE Elective*	3
TCM 360*	2
PH 322	3
	15

Total Credit Hours: 161

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in ME and Physics

Semester I	
ME 196*	3
EN 102	3
MA 106	5
Core Div I	3
CS 241	3
PE 101	1
	18

Semester II	
ID 103	3
MA 107	4
PH 201	5
SH 101	3
PE 102	1
	16

Semester III	
PH 202	5
MA 208	3
ME 270*	3
ID 201	3
ECON 101	3
	17

Semester IV	
MA 334	3
ID 202	3
PH 301	3
ME 274*	3
PH 303	3
	15

Semester V	
PH 302	3
MA 315	3
Foreign Language	4
CH 105	5
	15

Semester VI	
Foreign Language	4
PH 351	4
ME 200*	3
CH 106	5
	16

Semester VII	
ME 262*	3
Foreign Language	3
ME 310*	4
ME 330*	3
ME 272*	4
	17

Semester VIII	
Foreign Language	3
ME 301*	3
MSE 345*	3
ME 314*	4
ME 340*	3
	16

Semester IX	
ME 372*	4
ME 482*	3
ME Elective*	3
Div. 2 Elective	3
PH 311	3
	16

Semester X	
ME 401*	1
ME 462*	4
ME Elective*	3
ME Elective*	3
TCM 360*	2
PH 332	3
	16

* IUPUI Courses

Total Credit Hours: 162

Butler/IUPUI Dual-Degree Program in EE and Computer Science

FIRST YEAR

Fall Semester	
EE 196*	3
EN 102	3
MA 106	5
Foreign Language	4
PE 101	1
	16

Spring Semester	
ID 103	3
MA 107	4
PH 201	5
Foreign Language	4
PE 102	1
	17

Summer	
CS 241	3
CS 242	3
	6

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
PH 351	4
Foreign Language	3
EC 101	3
	18

Spring Semester	
MA 334	3
EE 266*	3
EE 267*	1
SH 101	3
Foreign Language	3
CS 321	3
	16

Summer	
MA 205	3
MA 206	3
	6

THIRD YEAR

Fall Semester	
MA 315	3
Division 1 Elective	3
CH 105	5
EE 202*	3
CS 351	3
	17

Spring Semester	
EE 255*	3
EE 208*	1
CH 106	5
EE 301*	3
CS 361	3
	15

Summer	
Internship	3
	3

FORTH YEAR

Fall Semester	
EE 311*	3
EE 302*	3
ID 201	3
ME 200*	3
CS 431 or CS 441	3
	15

Spring Semester	
EE 362*	4
ID 202	3
CS 435 or CS 451	3
EE 382*	3
CS Elective	3
	16

Summer	
Internship	3
	3

FIFTH YEAR

Fall Semester	
EE 305*	3
EE Elective*	3
EE 444*	3
EE 400*	1
CS 431 or CS 441	3
Div. 2 Elective	3
	16

Spring Semester	
CS 485	1
EE 492*	3
EE Elective*	3
TCM 360*	2
CS 473	3
	12

Total Credit Hours: 176

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in ME and Computer Science

FIRST YEAR

Fall Semester	
ME 196*	3
EN 102	3
MA 106	5
Foreign Language	4
PE 101	1
	16

Spring Semester	
ID 103	3
MA 107	4
PH 201	5
Foreign Language	4
PE 102	1
	17

Summer	
CS 241	3
CS 242	3
	6

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
ME 270*	3
Foreign Language	3
EC 101	3
	17

Spring Semester	
MA 334	3
ID 202	3
SH 101	3
Foreign Language	3
ME 274*	3
CS 321	3
	18

Summer	
MA 205	3
MA 206	3
	6

THIRD YEAR

Fall Semester	
ID 201	3
Division 1 Elective	3
CH 105	5
CS 351	3
MA 315	3
	17

Spring Semester	
PH 351	4
ME 200*	3
CH 106	5
CS 361	3
	15

Summer	
Internship	3
	3

FORTH YEAR

Fall Semester	
ME 262*	3
ME 310*	4
ME 330*	3
ME 272*	4
CS 431 or CS 441	3
	17

Spring Semester	
ME 301*	3
MSE 345*	3
ME 314*	3
ME 340*	3
CS Elective	3
CS 485	1
	17

Summer	
Internship	3
	3

FIFTH YEAR

Fall Semester	
ME 372*	4
ME 482*	3
ME Elective*	3
Division 2 Elective	3
CS 431 or CS 441	3
	16

Spring Semester	
CS Elective	3
ME 462*	4
ME Elective*	3
ME Elective*	3
TCM 360*	2
CS 473	3
	18

Total Credit Hours: 183

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in EE and Mathematics

FIRST YEAR

Fall Semester	
EE 196*	3
EN 102	3
MA 106	5
Foreign Language	4
PE 101	1
	16

Spring Semester	
ID 103	3
MA 107	4
PH 201	5
Foreign Language	4
PE 102	1
	17

Summer	
CS 241	3
	3

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
PH 351	4
Foreign Language	3
EC 101	3
	18

Spring Semester	
MA 334	3
ID 202	3
SH 101	3
EE 202*	3
Foreign Language	3
	15

Summer	
MA 205	3
MA 206	3
	6

THIRD YEAR

Fall Semester	
ID 201	3
MA 315	3
Division 1 Elective	3
CH 105	5
MA 326	3
	17

Spring Semester	
EE 255*	3
EE 208*	1
CH 106	5
EE 301*	3
MA 312	3
	15

Summer	
Internship	3
	3

FORTH YEAR

Fall Semester	
EE 311*	3
EE 302*	3
EE 266*	3
ME 200*	3
EE 267*	1
Math Elective	3
	16

Spring Semester	
EE 362*	4
EE Elective*	3
EE Elective*	3
EE 382*	3
Math Elective	3
	16

Summer	
Internship	3
	3

FIFTH YEAR

Fall Semester	
EE 305*	3
EE Elective*	3
EE 444*	3
EE 400*	1
Division 2 Elective	3
Math Elective	3
	16

Spring Semester	
EE 401*	1
EE 492*	3
EE Elective*	3
EE Elective*	2
TCM 360*	2
Math Elective	3
	15

Total Credit Hours: 176

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in ME and Mathematics

FIRST YEAR

Fall Semester	
ME 196*	3
EN 102	3
MA 106	5
Foreign Language	4
PE 101	1
	16

Spring Semester	
ID 103	3
MA 107	4
PH 201	5
Foreign Language	4
PE 102	1
	17

Summer	
CS 241	3
	3

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
ME 270*	3
Foreign Language	3
EC 101	3
	17

Spring Semester	
MA 334	3
ID 202	3
SH 101	3
Foreign Language	3
ME 274*	3
	15

Summer	
MA 205	3
MA 206	3
	6

THIRD YEAR

Fall Semester	
ID 201	3
MA 315	3
Division 1 Elective	3
CH 105	5
MA 326	3
	17

Spring Semester	
PH 351	4
ME 200*	3
CH 106	5
MA 312	3
	15

Summer	
Internship	3
	3

FORTH YEAR

Fall Semester	
ME 262*	3
ME 310*	3
ME 330*	3
ME 272*	3
Math Elective	3
	17

Spring Semester	
ME 301*	3
MSE 345*	3
ME 314*	4
ME 340*	3
Math Elective	3
	16

Summer	
Internship	3
	3

FIFTH YEAR

Fall Semester	
ME 372*	4
ME 482*	3
ME Elective*	3
Division 2 Elective	3
Math Elective	3
	16

Spring Semester	
ME 401*	1
ME 462*	4
ME Elective*	3
ME Elective*	3
TCM 360*	2
Math Elective	3
	16

Total Credit Hours: 177

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in EE and Biology

FIRST YEAR

Fall Semester	
CS 241	3
EN 102	3
MA 106	5
Division 1 Core	3
EE 196*	3
PE 101	1
	18

Spring Semester	
SH 101	3
ID 103	3
MA 107	4
PH 201	5
EC 101	3
PE 102	1
	19

Summer	
CH 105	5
CH 106	5
	10

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
ID 201	3
BI 110	5
	16

Spring Semester	
MA 334	3
PH 351	4
ID 202	3
Foreign Language	4
BI 301	4
	18

THIRD YEAR

Fall Semester	
MA 315	3
Foreign Language	4
BI 302	4
BI 303	4
BI 434	1
EE 202*	3
	19

Spring Semester	
EE 266*/EE 267*	3/1
Foreign Language	3
EE 301*	3
BI 350	4
BI 435	1
Division 2 Core	3
	18

FORTH YEAR

Fall Semester	
EE 255*	3
EE 208*	1
EE 362*	4
EE Elective*	3
Foreign Language	3
BI 364	4
	18

Spring Semester	
EE Elective*	3
EE Elective*	3
EE Elective*	3
EE 400*/EE 401*	1/1
TCM 360*	2
BI 357	4
	17

Total Credit Hours: 153

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in ME and Biology

FIRST YEAR

Fall Semester	
CS 241	3
EN 102	3
MA 106	5
Division 1 Core	3
ME 196*	3
PE 101	1
	18

Spring Semester	
SH 101	3
ID 103	3
MA 107	4
PH 201	5
EC 101	3
PE 102	1
	19

Summer	
CH 105	5
CH 106	5
	10

SECOND YEAR

Fall Semester	
PH 202	5
MA 208	3
ME 270*	3
ID 201	3
BI 110	5
	19

Spring Semester	
MA 334	3
ME 274*	3
ID 202	3
Foreign Language	4
BI 301	4
	17

THIRD YEAR

Fall Semester	
MA 315	3
Foreign Language	4
BI 302	4
BI 303	4
BI 434	1
	16

Spring Semester	
ME 200*	3
Foreign Language	3
PH 351	4
BI 350	4
BI 435	1
Division 2 Core	3
	18

FORTH YEAR

Fall Semester	
ME 310*	4
ME 330*	3
ME 272*	4
ME 401*	1
Foreign Language	3
BI 364	4
	19

Spring Semester	
ME 597*	3
MSE 345*	3
ME 314*	4
ME 402*	3
TCM 360*	2
BI 357	4
	19

Total Credit Hours: 155

* IUPUI Courses

Butler/IUPUI Dual-Degree Program in EE and Chemistry

Freshman Year (34 hours)

MA 106	(Calculus)	5
MA 107	(Calculus)	4
CH 105	(General)*	5
CH 106	(General)*	5
EN 102	(English)	3
ID 103	(English)	3
SH 101	(Speech)	3
EE 196	(Engineering)	3
CSCI 241		3

*CH 107, AP Chem, 6 hrs can replace CH 105 and CH 106

Math and Science (19 hours)

PH 201	(Physics)	5
PH 202	(Physics)	5
MA 208	(Calculus)	3
MA 315	(Linear Alge)	3
MA 334	(Diff Equ)	3

Engineering (Electrical - 35 hrs)

PH 351	4
EE 202	3
EE 208	1
EE 255	3
EE 266	3
EE 267	1
EE 301	3
EE 362	4
EE Electives	12
EE 400	1

Total 141 hours plus PE, for five years 14.1 hours per semester

Major - Chemistry (23 - 26 hours)

CH 351	(Organic)	5
CH 352	(Organic)	5
CH 321	(Analytical)	5
CH 471	(Physical)	3
CH 472	(Physical)	3

Select one course from the following

CH 422	(Analytical 2)	5
CH 332	(Inorganic)	4
CH 461	(Biochemistry)	3
CH 473	(PChem Lab)	2

General Education (27 hours)

EC 231 or EC 232	3
TCM 360	2
EE 401	1
Humanities	3
Social Sciences	3
Fine Arts	3
C&T	6
Foreign Language^	6

^ assumes ability to start at 200 level

Butler/IUPUI Dual-Degree Program in ME and Chemistry

Freshman Year (34 hours)

MA 106	(Calculus)	5
MA 107	(Calculus)	4
CH 105	(General)*	5
CH 106	(General)*	5
EN 102	(English)	3
ID 103	(English)	3
SH 101	(Speech)	3
ME 196	(Engineering)	3
CSCI 241		3

*CH 107, AP Chem, 6 hrs can replace CH 105 and CH 106

Math and Science (19 hours)

PH 201	(Physics)	5
PH 202	(Physics)	5
MA 208	(Calculus)	3
MA 315	(Linear Alge)	3
MA 334	(Diff Equ)	3

Engineering (Mechanical - 37 hrs)

PH 351	4
ME 200	3
ME 270	3
ME 272	4
ME 274	3
ME 310	4
ME 314	4
ME 330	3
ME Electives	6
MSE 345	3

Total 143 hours plus PE, for five years 14.3 hours per semester

Major - Chemistry (23 - 26 hours)

CH 351	(Organic)	5
CH 352	(Organic)	5
CH 321	(Analytical)	5
CH 471	(Physical)	3
CH 472	(Physical)	3

Select one course from the following

CH 422	(Analytical 2)	5
CH 332	(Inorganic)	4
CH 461	(Biochemistry)	3
CH 473	(PChem Lab)	2

General Education (27 hours)

EC 231 or EC 232	3
TCM 360	2
ME 401	1
Humanities	3
Social Sciences	3
Fine Arts	3
C&T	6
Foreign Language^	6

^ assumes ability to start at 200 level