## Seattle University

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SEATTLE UNIVERSITY


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Seattle University Bulletin of Information Editor / Jean Merlino
Photography by Allen Lee / Floyd Saiki / Jonathan Mylius

## Spring Quarter 1979

February 12-22 Advance Registration (Spring 1979)
March 26 Registration
March $26 \quad$ Classes Begin
March $30 \quad$ Last Day to Register
March $30 \quad$ Last Day to Add or Change
April 13 Good Friday-No Class
April 23-May 15 Advance Registration (Summer 1979)
May 7
May 16
May 28
May 29-June 1
June 2
June 3

April 23-May 15
June 15, 18
June 18
June 22
June 22
July 4
July 13
July 16
August 9-10

September 24
September 25
September 26
September 27
October 3
October 3
November 7
November 9-21
November 12
November 22-23
November 28
December 10-12

January 3
January 9
January 9
February 13
February 12-22
February 18
March 3
March 12-14

Last Day to Remove Incompletes
Last Day to Withdraw with 'W'
Memorial Day-No Class
Final Examinations
Baccalaureate
Commencement

## Summer Quarter 1979

Advance Registration (Summer 1979)
Registration
Classes Begin
Last Day to Register
Last Day to Add or Change
Independence Day-No Class
Close of First Term
Registration Second Term
Final Examinations
Fall Quarter 1979
Orientation, Registration
Registration
Registration
Classes Begin
Last Day to Register
Last Day to Add or Change
Last Day to Remove Incompletes
Advance Registration (Winter 1980)
Veteran's Day Holiday
Thanksgiving Holiday-No Class
Last Day to Withdraw with 'W'
Final Examinations

## Winter Quarter 1980

Registration-Classes Begin
Last Day to Register
Last Day to Add or Change
Last Day to Remove Incompletes
Advance Registration (Spring 1980)
Washington's Birthday-No Class
Last Day to Withdraw with 'W'
Final Examinations

The University reserves the right to change the fees, rules and calendar regulating admission and registration, instruction in, and graduation from the University and its various divisions and to change any other regulations affecting the student body. Changes go into effect whenever the proper authorities so determine and apply not only to prospective students but also to those who at that time are matriculated in the University. The University also reserves the right to discontinue courses at any time.
As a general rule, students follow the academic programs contained in the Bulletin of Information in effect at the time of their matriculation.


## Purpose and Scope

Seattle University, an institution of higher learning, has for its object and purpose:

- the conservation, interpretation and transmission of knowledge, ideas and values;
- the extension of the frontiers of knowledge by critical and exhaustive investigation or experimentation;
- the preparation for some of the professions by thorough and intelligent training in the theory and principles underlying those professions.
As a University, it attains its end not only through the sciences and humanities, including philosophy and theology, but also through its professional schools.
As a University operated under the sponsorship and direction of the members of the Jesuit order:
- it affirms its belief in a support of Christian ideals and values;
- it affirms its belief in the unity and totality of all human knowledge, whether experimental, speculative, or divinely revealed;
- it seeks, by a faculty inspired with the Spirit of Christ and by the creation of a liberal atmosphere inside and outside the classroom, to develop an unbiased, truly liberated and enlightened intelligence in its faculty and student body.


## History

Seattle University's development as one of the Pacific Northwest's leading universities is closely interwoven with the history of Seattle and the Pacific Northwest. It is the story of a continuing effort on the part of the University to help meet the educational demands of a burgeoning area.
In 1893, the cornerstone of the first building on the present campus at Broadway and Madison Streets was laid. The building is now the Garrand Building.

In 1907, at the request of former students, evening courses were first offered. The University granted its first bachelors' degrees in the spring of 1909 and the first graduate degree was awarded in 1910.
The first women students were admitted to credit courses in 1933. Seattle University's second academic unit, the School of Education, was added in 1935. In 1937, full accreditation was granted by the Northwest Association of Secondary and Higher Schools. The School of Nursing was established in 1940 and the School of Engineering added in 1941. A fifth major academic unit, the School of Commerce and Finance was initiated in 1945.
On May 28, 1948, full university status was granted by the State of Washington and Seattle College assumed its present title, Seattle University.

## Organization

Seattle University is a private, coeducational university conducted by the fathers of the Society of Jesus, popularly known as the Jesuits. It is open to students of all races and denominations and is incorporated under the laws of the State of Washington. One of 28 Jesuit colleges and universities in the United States, it derives its tradition and objectives from four centuries of academic experience and educational ideals of the Society of Jesus, implemented by nearly two thousand years of Christian tradition and knowledge.
The University is composed of seven major academic units:
The College of Arts and Sciences; The Albers School of Business; The School of Education; Matteo Ricci Col-lege-II; The School of Nursing; and The School of Science and Engineering. The Graduate School has programs leading to masters degrees in business, education, engineering, public administration, rehabilitation and religious education. A Doctoral Program in Educational Leadership is offered.

## Accreditation

The University is accredited by:
Northwest Association of Schools and Colleges
National League for Nursing
American Chemical Society
Engineering Council for Professional Development American Assembly of Collegiate Schools of Business National Council for Accreditation of Teacher Education

## is approved by:

Washington State Board of Education
American Medical Association
American Society of Clinical Pathologists
American Medical Record Association
Washington State Board of Nursing
The University is a member of: American Association of Colleges for Teacher Education, American Council On Education, Association of Higher Education, Association of Jesuit Colleges and Universities, Independent Colleges of Washington, National Commission on Accrediting, Northwest Association of Colleges and Western Interstate Commission for Higher Education.


## Campus and the City

Seattle University is located on a 41-acre campus on Seattle's historic First Hill. Within short walking distance are the city's major education, cultural and recreational facilities, business and shopping centers and the Puget Sound waterfront.

The University's physical facilities serve a current student enrollment of 3,800 . Presently, the campus contains 23 buildings, including modern classrooms, student and faculty residences and service units.

The housing facilities available on campus are Bellarmine Hall, Xavier Hall and Campion Tower. Residence halls are coed.

On campus facilities include the A.A. Lemieux Library (1967), the major study and resource center, with seating for 1,100 students. A variety of study areas, including individual carrells, study lounges and conference rooms, are available for the student's comfort and convenience.

The Connolly Center (1969) is the physical education teaching facility. In addition to classroom areas, recreational facilities include two swimming pools, basketball, badminton, tennis and handball courts and a gymnastics and dance area.

The Student Union Building (1953), the Chieftain, houses the office of the Vice President for Student Life, student offices, dining, lounge and meeting areas. A selection of auditoriums are available in the A.A. Lemieux Library, the William Pigott (1957) and Thomas J. Bannan (1961) Buildings for films, lectures, meetings and musical presentations.

Other major campus structures include the Liberal Arts Building (1941); Bookstore Building (1964); Loyola, the Jesuit faculty residence and the McGoldrick Student Development center.

Seattle University is located in a seaport city surrounded by unsurpassed natural beauty. Seattle, the largest city in the Pacific Northwest and one of the 25 largest in the United States, has all the scenic and cultural variety of a metropolitan city with the unique advantage of mountains and water at its back door.

Within city boundaries, Lake Union and Lake Washington provide the opportunity for sailing, boating, water skiing and swimming.

Ski areas are within an hour's drive of the city, with night and weekend skiing during winter months. Easy hikes, with trails marked and guide books available, are popular in the spring and summer months, as well as more difficult hikes for seasoned enthusiasts.

Bicycling has become increasingly popular and trails are set aside in various areas of the city.

Golf Courses, tennis courts, and indoor and outdoor pools for year-round swimming are available in addition to fishing and hunting opportunities.



## Student Life

The principal function of a university is to provide an atmosphere conducive to intellectual progress - laboratories, library, classrooms and stimulating teachers. However, it is recognized that the total development of the individual is equally important. Certain services have been introduced at Seattle University to serve the spiritual, social, personal and physical needs of the student body. These services are aids in making the educational pursuits of students more profitable and satisfying.

## Athletics

Seattle University is a member of the National Collegiate Athletic Association, the Association of Intercollegiate Sports for Women and the West Coast Athletic Conference. Its intercollegiate athletic policies are governed by the constitution and by-laws of these associations, and the athletic director administers the intercollegiate and intramural athletic program. Seattle University men compete on the intercollegiate level in basketball, baseball, golf, tennis, soccer and cross country. The women's intercollegiate sports program includes competition in basketball, gymnastics, tennis and volleyball. A comprehensive intramural program is also offered to all students in several formal and informal sports activities. The primary athletic facility on campus is the Connolly Center, a recreation and physical education complex built in 1968.

The Campus Ministry team is committed to developing the spiritual life of the University community. Besides providing sacramental and liturgical celebrations for Catholics, the team is concerned with nurturing the values of Christian Humanism, Retreats, Searches, Facul-ty-Staff Renewals, Reach Out programs, individual spiritual direction and off-campus student CARISM communities enable members of the community to enrich and share their spiritual values and religious traditions.

The Career Planning and Placement office makes career counseling and informational services available to students and alumni, and coordinates the part-time work-study function on campus.

The Child Care Center is open to children, ages two and one half to five years, from families of students and employees of Seattle University, and supplements the University's community program by also serving children from families within the surrounding Central City community.

The Counseling and Testing Center offers personal and vocational counseling for all students focused on developing self-awareness, and improving individual communication skills and interpersonal relationships. Counseling is available to students with personal problems and to help each person derive the maximum benefit from their University career. Tests of scholastic ability and vocational aptitude are also offered. Counseling services are confidential and do not become a part of the student's academic record.

The International Student Adviser is the campus liaison for all students from abroad. It provides a "home base" for these students, facilitating the assimilation of the International students into the University community.

The Minority Student Affairs office serves the personal, academic and cultural needs of the ethnic minority students attending the University, coordinating activities of such student groups as the Native American Club, the Black Student Union, Kapatiran and the Rainbow Coalition. The scope of the Minority Student Affairs office is not limited to the campus perimeter, as it serves as liaison between the University and the many minority communities in Seattle.

## Student Health Center

Students enrolled for 9 or more credit hours qualify to participate in University health services, administered through the Student Health Center on campus.

## Student Health Insurance

Full-time students and their dependents are eligible to participate in the University's voluntary student health insurance program. The program provides accident and sickness benefits. Insurance may be purchased at registration.



## COSTS-GENERAL INFORMATION

All charges are due and payable at the time of advanced registration or on registration day. Registration is a coordinated process involving the Registrar, the Controller and the Director of Financial Aid. Seattle University reserves the right to change its charges without notice prior to the beginning of each quarter or summer session.

A student who has not met financial obligations following registration will have his/her registration cancelled unless allowed to continue under conditions agreed to by the Controller.

## Tuition Rates

Undergraduate courses: Fall, Winter Spring $\$ 69.00$ per credit hour Masters degree programs

Business
...
Rehabilitation . . . . . . . . . . . . . . $\$ 82.00$ per credit hour
Education ................... $\$ 70.00$ per credit hour
CORPUS Masters . . . . . . . . . $\$ 73.00$ per credit hour
Transportation Engineering . $\$ 82.00$ per credit hour
Software Engineering ....... $\$ 82.00$ per credit hour
Doctor of Education ........... . $\$ 98.00$ per credit hour

## Certificate programs

Alcohol Studies ............ $\$ 49.00$ per credit hour
Rehabilitation ............ $\$ 69.00$ per credit hour
CORPUS............... $\$ 73.00$ per credit hour
Transportation Engineering . $\$ 82.00$ per credit hour
Health Information ......... $\$ 69.00$ per credit hour
Human Resources
Development $\ldots \ldots \ldots . . \$ 82.00$ per credit hour
Auditors tuition .............. $\$ 25.00$ per credit hour

## Refunds

## Withdrawals (full or partial)

| 2-10 class days. | 80 percent |
| :---: | :---: |
| 11-15 class days. | 60 percent |
| 16-20 class days. | 40 perc |
| Thereafter | No re |

Refunds are based on the number of consecutive Monday through Friday days from the first day of classes until the official date of withdrawal according to the above schedule. At least 10 class days must elapse between date of withdrawal and date of refund.

## Fees-Non-Refundable

Application graduate ................................. $\$ 15.00$
(must accompany application form)
Application, transient students ................. . $\$ 10.00$
Late registration, per day . . . . . . . . . . . . . . . . . . . . \$10.00
Matriculation, graduate ............................... $\$ 20.00$
Credit by examination (Per credit hour) ...... $\$ 15.00$
Validation of field experience
(per credit hour)
$\$ 20.00$
Removal of incomplete (per course) . . . . . . . . . . \$12.00
Graduation, graduate (per degree) ............ $\$ 50.00$ Graduation fees are due at the time of application for graduation, and graduation forms will be released only upon presentation of a receipt.
Certificate Fee $\$ 10.00$
Thesis binding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.00$
Graduate Record Examination .................. \$ 7.00
Medical Technology internship
(per credit hour) . . . . . . . . . . . . . . . . . . . . . . . . . \$ 5.00
Special Examination (per subject) ............. \$ 5.00

## Laboratory Fees

Business 500 ....................................... . . . $\$ 17.00$
Education: Ed 528 .................................. . . \$ 6.00
Ed 547 ................................................. $\$ 12.00$



## Financial Aid

New and continuing graduate students may apply for financial aid for tuition, room and board, transportation, books and supplies, fees, and personal expenses. To determine the ability of the student and/or the student's family to contribute to educational expenses, a Financial Aid Form is completed by the student and/or family and is then mailed to the College Scholarship Service, Berkeley, California. Once the expected student and/or family contribution is determined, the University will attempt to supplement that amount with financial aid so the total cost of attending SU can be met from three sources-student, family and financial aid.

## AID PROGRAMS AVAILABLE

The National Direct Student Loan (NDSL) - A longterm low interest rate (three per cent) loan based on financial need. Eligible students may borrow a total of $\$ 10,000$ for their combined undergraduate and graduate education. Repayment begins nine months after the student ceases to be at least a half-time student. The NDSL also includes deferment and forgiveness features -and repayment may extend ten years.

The Federally Insured Student Loan (FISL)-A longterm loan issued by a bank, credit union or other lending institution. Students may borrow a total of \$10,000 for their undergraduate and graduate education combined. Repayment begins nine months after the student ceases to be at least a half-time student. The annual interest rate is seven per cent and repayment may extend ten years.

Students need not qualify under the need formula to apply for a FISL and the federal government will pay, for qualified students, the interest which is due on the loan while the student is in school.

The Federal College Work-Study Program-Students may earn funds by working part time on or off campus. Earnings are limited to the student's eligibility established under the need formula.
The Washington State Work-Study Program-Students may earn funds by working part time in jobs generally off campus. Earnings are limited to the student's eligibility established under the need formula.
Please note that the Work Study Program is an opportunity to earn funds by working. Eligible students are not required to work nor are jobs guaranteed under the work study program. However, students must find employment and work under the program if they intend to acquire work study funds. The Career Planning and Placement Office, does assist all students seeking employment including those who establish work-study elibibility.

## Application Process

Students will be considered for aid who:

- Have been accepted for admission to Seattle University.
- Have completed and filed the Financial Aid Form, the Seattle University application for Aid, and all other necessary documents.
- Have enrolled as at least a half time graduate student.


## Deadline

While applications for aid are encouraged at any time, students who have all documents into the Seattle University Financial Aid Office by March 1, 1979 will be considered first for funds available for the academic year starting in September, 1979. Processing the Financial Aid Form can take up to four weeks so students are advised to start the application process well in advance of the March 1, 1979 deadline. Deadlines for other quarters will be announced by the Financial Aid Office.



## Graduate School

Graduate studies directed toward the master's degree were first offered at Seattle University in 1910 in a division of its College of Arts and Sciences. In 1935 graduate courses became an integral part of the University's teaching education program. In 1976 the first doctoral program began.

## Objectives

Graduate School programs are not merely more courses in undergraduate study; they involve courses advancing by gradation into greater complexity and profundity. The content of graduate courses is of a more advanced nature, the requirements in terms of bibliography, quantity and quality of thinking and writing are higher, and the degree of initiative, the organizing ability and originality expected is greater.

Only a limited number of undergraduate courses may be accepted for credit. Graduate students should not consider the mere literal fulfillment of requirements as conferring the right upon them to continued registration. Academic advancement and eligibility for degrees are continaent also upon recommendation and approval of the Graduate Committee of the school or department and the University Graduate Council.

## Organization

Administration of the Graduate School and supervision of all programs leading to the master's and doctor's de-
grees lies with the Dean of the Graduate School and the Graduate Council. The Dean of the Graduate School and the Council establish and maintain requirements for degrees according to the recommendations of the graduate committee of each school of the University.

The component schools and various departments provide courses of instruction for graduate students, direct their studies, conduct examinations, maintain requirements and make recommendations. Academic transactions involving admission, registration and awarding of degrees are supervised by the University's Registrar. Actual admission to graduate study is granted through the Dean of the Graduate School in consultation with the appropriate graduate program director involved in the counseling of the applicant.

## Admission Requirements

Admission to the degree program is granted to applicants who have received the bachelor's degree from an approved college or professional school, and whose scholarship records and credentials indicate ability to pursue graduate work. An undergraduate major and an undergraduate minor or their fair equivalents are required in the same departments or areas from which the student selects his/her graduate work.

Application for admission should be submitted as early as possible before the opening of the term in which the student wishes to begin work. Prospective students must file an official application form and fee with the Office of Admissions. In addition, two official transcripts of academic credits from the institution granting the bachelor's degree and all schools attended since the undergraduate degree was granted are to be sent directly to Seattle University by each institution. Failure to file complete records of previous school attendance renders the student liable to dismissal or cancellation of credit. A student is not regarded as a duly qualified graduate student until he/she has received a letter of acceptance from the Dean of the Graduate School.

For specific program admission requirements consult the appropriate sections of this bulletin.

Admission to the Master of Pastoral Ministry Program is granted only to those who have completed the certificate in Pastoral Ministry. For other requirements, see section on Pastoral Ministry.

Some students are admitted to the Graduate School on probation. This designation may be used when (1) the previous academic record is marginal or when there is a lack of adequate prerequisite course work in the chosen field or (2) when the applicant has majored in another area with a satisfactory record, but there is some doubt about ability to pursue the program in question. A program to correct these deficiencies will be designed by the department and the student is expected to become qualified within a specified time limit. When all conditions have been fulfilled the department may recommend that the student be advanced to regular graduate status. Students who are unable to qualify for admission to regular graduate status will either be considered for another graduate program or dismissed.

Provisional admission to the Graduate School is granted to an applicant who must fulfill a special requirement to qualify for formal admission to graduate standing.

## Academic Regulations

Each student is responsible for informing himself/herself of the academic regulations and requirements set forth in this Bulletin of Information and for revisions of same as posted on campus bulletin boards or in other official publications of the University. Failure to meet the requirements or comply with regulations because of lack of knowledge thereof does not excuse the student from being subject to them. A detailed explanation of academic regulations may be found in the University's undergraduate Bulletin of Information.
A student's program of study must be approved by a member of the faculty, usually the adviser, at registration. However, such approval does not give official sanction to any failure to meet University requirements nor does it free the student of that responsibility necessary to intelligent personal choice.
The Academic Council has discretionary powers for all cases not covered by the rules and regulations listed in this section. The University reserves the right to cancel any class which does not meet the required minimum enrollment. The enrollment and graduation of each student, the awarding of academic credits, and the granting of any award or degree are strictly subject to the disciplinary power of the University. The University reserves the right to change any requirement and to ask a student to withdraw at any time.
The policy of Seattle University on the right of student access to his/her educational record and on confidentiality of information conforms to current public law. The full statement of policy is available for inspection in the Office of the Academic Vice President and/or Registrar.

## Graduate Students

A graduate student is one who has been admitted to the Graduate School to pursue a program of study leading to a specific certificate, master's or doctoral degree. Graduate students are classified as regular, on probation or visiting. A student admitted on probation must demonstrate in the first quarter ability to do work of graduate quality. A visiting graduate student may take graduate courses for a single quarter only. In special circumstances, an undergraduate senior or fifth year student may be allowed to enroll in a graduate course with prior approval of the director of the graduate program in the area of the course in question or of the Dean of the College or School in which the course is taught.

Students pursuing course work beyond the bachelor's degree, who are not admitted to the Graduate School for a specific advanced degree are granted status as fifth year students and are under the jurisdiction of the dean of the college in which they are taking courses. A student pursuing certification in education is not a graduate student unless in addition to this study supervised by the School of Education he/she has been accepted by the Graduate School in a master's degree program.

## Attendance Requirement

Attendance may be an essential and intrinsic element of the educative process. In any course in which attendance is necessary to the achievement of a clearly dedfined set of course objectives, it may be a valid con-
sideration in determining the student's grade. While there is no all-University regulation requiring class attendance, it is the responsibility of the instructor to state the relevance of attendance at the beginning of each course.

## Classification of Students

5th year- post baccalaureate students not seeking an advanced degree
Graduate - post baccalaureate students admitted to Graduate School for a master's or doctorate degree program
Special - an undergraduate student awaiting approval for regular status
Transients- non-matriculated students registering for one or two quarters only
Auditors-non-matriculated students registered for audit only not for regularly graded credit

## Course Numbering System

The course numbering system at Seattle University is as follows:

100 to 199 are freshman courses
200 to 299 are sophomore courses
300 to 399 are junior courses
400 to 499 are senior courses
500 and above are graduate courses-graduate standing required to register for courses numbered 500 or above.

## Concurrent Enrollment at Two Colleges

University regulations require students to seek written permission to be enrolled at another institution simultaneously with enrollment here. Credits completed at a second institution are not transferable unless prior to enrolling elsewhere a faculty action authorizing dual enrollment is approved by the Dean and Registrar.

## Examinations

Examinations in all courses are regularly held at the middle and end of each quarter, and at such other times as the instructor may determine. Absence from an announced written examination is excusable at the discretion of the instructor and subject to review by the dean. Students absenting themselves from a scheduled examination without justifiable cause will receive a failing grade for the examination.

## Grade Changes

Once a grade is recorded it can be changed only by the Academic Vice President on the written faculty action sheet completed by the instructor and countersigned by the department chairman and dean of the school. Errors in grades must be reported within six months of date of issue of grade reports.

## Grade Reports

Student quarterly grade reports are mailed at the end of each quarter. The University does not hold itself responsible for grade report errors unless the Registrar is notified of the error within six months after the date of issue of a grade report.

## Graduate Grading System

In order to graduate, a student must have maintained a 3.0 (B) cumulative grade average based on the following scale.


A student must repeat a required course if a D grade is received. The grade received the second time will be used in computing the gpa for graduation; the original grade, however, will remain on the record.

## Other Grading Symbols

N No Grade-a suspended grade for courses in which work is not scheduled for completion until after the quarter closes, i.e. thesis or research courses at the graduate level. It is the responsibility of the student to arrange with the supervising instructor to remove the N within one calendar year of the quarter the grade is assigned, per the schedule given below. Once the closing date has passed, re-registration and payment of regular tuition is required in order to obtain credit for the work completed.

## N Grades Received

Summer term
Fall term
Winter term

Spring term

Must be Removed Before
August of the following calendar year
December 1 of the following calendar year
March 1 of the following calendar year May 1 of the following calendar year

Satisfactory-a satisfactory grade which may be given for thesisn research, independent study, offcampus courses, field experience type courses and in non-credit courses.

Y audit-course for which no credit is given.
Audit Withdrawal-registered but did not attend through end of course.
Missing-symbol used on grade reports to inform student that grade has not been received from instructor.

## Readmission

Students who have been absent from Seattle University for one or more quarters and students who have attended another school since withdrawing from Seattle University are required to fill out an application for readmission form. A re-entering student who has attended another school since withdrawal from Seattle University must arrange for two copies of his/her transcript to be submitted to the Registrar before application for admission can be considered.

## Records

As required by federal legislation, Seattle University has a policy on the rights of students to privacy of their educational records and access to the information on file. This policy is published annually in the student newspaper. Student directory information will be published by the University unless a student requests it not be released in writing to the Registrar by the fifth day of any term. Records policy includes the right of the University to place a hold against the transcript of a student with a financial obligation and to deny re-registration until all debts owed the University have been paid. The full policy statement including right of appeal may be obtained from the Registrar.

## Registration

Newly admitted students and returning students must present themselves at the University for registration on the date specified in the calendar or elsewhere.
No registrations are permitted after the fifth class day. Payment of the late registration is required. Students registering late are held responsible for absences thus incurred.

Registration is completed only when fees are paid and approved registration cards are turned in to the Controller's office. No person may attend any University course for which he/she has not registered.

## Registration Changes

Students are held accountable for completion of every course for which they register. If it is necessary to drop or add a course or to otherwise change a program of study, the student must obtain a change of course card from the Registrar's office and present it to the adviser or dean for approval. This card must be returned to the Registrar within the specified time limit. No course may be added or changed after the fifth day of class. A student who drops or changes courses without following this procedure is ineligible for tuition refund and will be assigned a grade of NC.



## Transcripts

Students may obtain official transcripts from the Registrar's office. No official transcript will be sent for students with a financial obligation to the University.
Seattle University will not issue a transcript to any third party unless the student or graduate files a written request with the Registrar and supplies the name and address.
Letters of recommendation or copies of transcripts should be requested at least one week before they are required. Transcripts cannot be issued during the period of registration, examinations, or commencement.
The University does not hold itself responsible for any error on a transcript which is not brought to the attention of the Registrar within six months of the closing date of the quarter in which the error occurred.

## Transfer within the University

To transfer from one school of the University to another or from one department to another (change of major) the student must follow this procedure:

Obtain a form from the Registrar and present it to the dean of the school from which withdrawal is sought. When the form is approved by this dean it is presented to the dean of the school in which the student wishes to enroll. If approved by the new dean the form is returned to the Registrar and the student's record is altered accordingly.

## Withdrawal

The Registrar's office must be officially notified when a student withdraws from one or more of his courses. The withdrawal card is obtained from the Registrar and presented to the adviser, instructor, dean and Registrar in that order for approval and signature. In an emergency, notification of withdrawal may be made by telephoning the dean of the school or Registrar.

The official withdrawal is completed only when the approved card is presented to the Registrar within the specified time limit. A grade of W will be allowed until the eighth last class day of the quarter.

## Degree Requirements

## Admission to Candidacy

Application for admission to candidacy for a master's degree should be filed after the student has completed from 10 to 20 credits in courses applicable to the graduate program of the department, with a grade average of no less than B in these courses. Admission to candidacy for the master's degree in Pastoral Ministry is applied for after completion of the certificate program.

## General Requirements

Official Commencement Exercises are held once a year in June. Students completing course requirements at the close of summer, fall or winter quarter will receive diplomas at the succeeding Commencement. All responsibility for fulfilling the requirements for graduation rests with the individual student.

The candidate for the master's degree must present a minimum of 35 credits beyond the bachelor's degree. He /she must satisfy any additional requirements imposed by the major department and the Graduate Council. In those programs which require over 35 credits, only 35 credits are required for those candidates who already have earned a master's degree in a related area.

All work must be of distinctly advanced character but, with the approval of the department and the Graduate Council, 15 credits in programs requiring only the minimum of 35 credits and 20 credits in those requiring 40 or more credits may be earned in courses numbered 300 to 499, if the subjects are suitable to the student's program. A maximum of 10 credits may be transferred from another institution if they are earned with a grade of "A" or " B " and approved by the department and Dean of the Graduate School.

Distribution of course work will be according to a program approved by the Dean of the Graduate School.

Most programs for the master's degree require the candidate to pass a comprehensive examination in the major field of study. This examination shall be written and/ or oral at the judgment of the department and the approval of the Graduate Council. A "B" average is required for work done toward the master's degree.


The student may be required to complete a thesis on a topic approved by his/her major department and the Dean of the Graduate School. For this work, no more than 10 credits are granted. The thesis is not necessarily a work of original research but it must, however, demonstrate the candidate's ability to collect facts, interpret them in a critical manner and organize and express them in an original, lucid way.

The topic of the thesis is to be approved by the student's mentor, graduate program adviser and the Dean of the Graduate School and filed with the Graduate School when 30 credits of the graduate program have been completed.

All thesis work must be done under the direct supervision of an assigned adviser.

Four unbound copies of the approved thesis are to be filed in the office of the dean four weeks before the date of graduation. Two of these copies will be bound and placed on file in the University's library; one copy will go to the department chairman and one copy to the student.
An oral examination on the content of the thesis, cognate literature and available source material may be held before a board appointed by the departmental chairman and approved by the Dean of the Graduate School.

All requirements for the master's or doctor's degree must be completed within six years after course work is begun, including the time of any courses for which the candidate applies for transfer of credit. The application for the degree must be filed with the University Registrar by February 1 preceding the June in which the degree is to be received. Ordinarily each candidate for the Master of Arts degree will give evidence of a reading knowledge of a foreign language. Application for this examination must be made with the departmental office not later than April 15 preceding the June in which the degree is to be received. The Graduate School alone has the power to recommend a candidate for a Master's or Doctor's degree.

## Application For a Certificate

Application for a certificate must be made at the office of the Registrar within the first four weeks of the student's last quarter in a certificate program. A receipt for the certificate fee must be presented before the Registrar may issue the application forms.

## Application for a Degree

Application for a degree must be made at the Office of the Registrar within the period indicated in the University calendar or other official publications. Candidates for a degree normally file applications during the quarter preceding their final registration. A receipt for the graduation fee must be presented before the Registrar may issue the application forms.

## Degree Requirements

As a general rule, students are required to meet degree program requirements in effect at the time of their matriculation.


## Degrees Offered

Graduate Degrees offered by the University are:

## ARTS AND SCIENCES

Master of Arts—Rehabilitation
Master of Pastoral Ministry
Master of Religious Education (summer only)

## BUSINESS

Master of Business Administration

EDUCATION
Master of Arts in Education
Master of Counseling
Master of Education
Doctor of Education

PUBLIC SERVICE<br>Master of Public Administration

## SCIENCE AND ENGINEERING

Master of Software Engineering
Master of Transportation Engineering


## College of Arts and Sciences

William F. LeRoux, S.J., S.T.D., Dean

## Master of Arts in Rehabilitation

Ekkehard J. Petring, Ph.D., Chairman

## Objectives

The Master of Arts in Rehabilitation is designed to prepare graduates for professional responsibilities in the human service field. To attain this major objective, the program is designed with the following goals: (1) to develop the graduate's rehabilitation skills for the entry level in private or public rehabilitation settings; (2) fulfill the need of the professional rehabilitation worker who wants to continue his/her education; (3) to fulfill the need of the student who wants an opportunity to specialize in the rapidly changing field of rehabilitation; (4) to fulfill the need of the student who wants in-depth study in a selected area of concentration.

The program prepares students who, upon graduation become employed as counselors in public and private human service settings, such as State vocational rehabilitation agencies, federally sponsored human service agencies, county agencies, social welfare agencies, poverty programs, prisons, evaluation centers, and health related associations, as well as private agencies such as transitional workshops, rehabilitation centers, hospitals, speech and hearing centers, work activity centers (adult development centers), and others.
The development and improvement of counseling skills will be emphasized. Special attention will be given to counseling methods utilized in the student's area of interest. Furthermore, each student will select electives in his/her area of interest.

## General Program Requirements

Each student is responsible for knowing the academic regulations and requirements set forth in this Graduate Bulletin and for revisions of same.

Depending upon an applicant's professional background, the minimum number of credits are 45 , the maximum 67.

A one-to-two day comprehensive written/oral examination will be required of rehabilitation graduate students nearing completion of their degree requirements.

## Program of Study

The Master of Arts in Rehabilitation is comprised of four phases of study: A) Foundation; B) Rehabilitation core;
C) Electives; and D) Educational research.

## A. Foundation Courses

(may be waived for students with satisfactory prior academic coursework or relevant job experience):

Rhb 301 Environmental Impact of Disability
Rhb 305 Medical Aspects of Disability
Rhb 400
Rhb 405

## Rehabilitation Resources

Job Placement and Development

## Degree Offered

Master of Arts in Rehabilitation

## Admission Requirements

a. Bachelor's degree from an accredited academic institution, preferably in one of the social sciences.
b. GPA: 3.00 minimum.
c. Miller Analogies Test.
d. Personal interviews with rehabilitation faculty.
e. Two letters of recommendation.
f. In most cases, prior to acceptance, one year of experience in the field of rehabilitation or a related area.

## B. Rehabilitation Core Courses

RHB 500 Principles of Rehabilitation
RHB 505 Vocational Diagnosis
RHB 510 Rehabilitation Counseling Process
RHB 515 Supervision and Management in Rehabilitation
RHB 520 Group Process in Rehabilitation
RHB 530 Practicum in Rehabilitation
RHB 531 Practicum in Rehabilitation
RHB 540 Internship in Rehabilitation

## C. Electives (Four to six credits)

The course, or courses, chosen by the student must reflect relevance in his/her area of interest in rehabilitation. Courses in Alcohol Studies may be chosen up to a total of 14 credits, which constitutes a specialty program.

## D. Educational Research (One course)

ED 500 Introduction to Research and Graduate Study (3 credits)

## Rehabilitation Courses

## A) Foundation Courses

Rhb 301 Environmental Impact of Disability 5 credits Impact of mental, physical, and social disabilities as related to the individual, his/her social environment, the culture and its values, economic situations and vocational opportunities.

Rhb 305 Medical Aspects of Disability 5 credits Study of medical terminology and analysis of various disabling conditions and diseases for a basic understanding of general medical and specialist examinations.
Rhb 400 Rehabilitation Resources
5 credits
Rehabilitation community organization, its power structure, and methods of determining, evaluating and analyzing rehabilitation resources.
Rhb 405 Job Placement and Development 5 credits Nature and use of occupational information as applied to job characteristics, job development, job seeking skills, vocational theories and practical experience.

## B) Rehabilitation Core Courses

Rhb 500 Principles in Rehabilitation
5 credits
Integration of history, present philosophy and practice in rehabilitation; trends in serving varying disability groups.

Rhb 505 Vocational Diagnosis
3 credits
Critical review of clinical methods; individual appraisal and other methods of assisting the person with a disability in selecting a vocational objective; case review and analysis.

Rhb 510 Rehabilitation Counseling Process 3 credits Theories of rehabilitation counseling, their techniques and emphasis on application in rehabilitation settings.

Rhb 515 Supervision and Management in Rehabilitation

3 credits
Principles of supervision and management; fiscal and case management as it applies to a variety of health and rehabilitation facilities.

Rhb 520 Group Process in Rehabilitation 3 credits Seminar on the rehabilitation process, techniques, and selected counseling theories as applied to groups in conjunction with one supervised practicum experience.

Rhb 530 Practicum in Rehabilitation 3 credits Counseling experience applying the principles of rehabilitation; the student works part-time in a rehabilitation agency (one hour of individual supervision per two hours of practicum experience).

Rhb 531 Practicum in Rehabilitation
3 credits
Rhb 540 Internship in Rehabilitation
1-15 credits Full-time placement in a rehabilitation setting, integrating and applying knowledge from the classroom; further development of counseling skills emphasized, students will be supervised by faculty and agency personnel.

| RHB 591 | Special Topics | $1-10$ credits |
| :--- | :--- | :--- |
| RHB 592 | Special Topics | $1-10$ credits |
| RHB 593 | Special Topics | $1-10$ credits |
|  |  |  |
| RHB 596 Individual Research | $1-10$ credits |  |
| RHB 597 Individual Research | $1-10$ credits |  |
| RHB 598 | Individual Research | $1-10$ credits |

RHB 592 Special Topics $\quad \mathbf{1 - 1 0}$ credits
RHB 593 Special Topics
1-10 credits
RHB 597 Individual Research
$1-10$ credits


Theology and Religious Studies
Richard H. Ahler, S.J., S.T.D., Chairman

## Degrees Offered

Master in Pastoral Ministry Certificate in Pastoral Ministry Master of Religious Education

## Master of Religious Education (SUMORE) Leo Stanford, Ph.D., Director

For Admission - a Bachelor of Arts degree or equivalent; 10 quarter credits or 6 semester credits of theology, or the equivalent in non-credit workshops or approved independent reading; grade point average of 3.00 for regular standing; no transfer credits accepted; no language requirements.

For Degree Conferral - 43 credits of course work completed over three eight-week summer sessions with adequate graduate achievement; all core subjects required; final written comprehensive examination; a 3 credit practicum research thesis. At the discretion of the director of the program and the Dean of the Graduate School, six quarter hours of graduate credits in areas related to religious education may be substituted for the practicum research thesis. A student permitted to make this substitution would complete 49 credit hours for the degree. These substituted credits may be earned only after attendance at the first two summer sessions. The substitution of these credits may be made from any college or university offering a graduate program in the areas related to religious education. Students must ordinarily live on campus; all degree work must be completed within six years of the initial summer.

CORPUS-Certificate in Pastoral Ministry; Master's Degree in Pastoral Ministry, optional.
For Admission - A bachelor of arts degree or equivalent; at least 2 years experience in some form of ministry, apostolic activity or Church service; psychological testing; personal interview; letter of recommendation.

For Certificate-Successful completion of the CORPUS Program which includes: A total of 36 quarter credit hours in theology, theological reflection, pastoral skill-building workshops and supervised fieldwork.

For Degree Conferral-A bachelor's degree, 12 semester hours of undergraduate theology coursework or equivalent, successful completion of the CORPUS Program, an additional 9 hours involving a special project over at least 9 months. With the approval of the CORPUS staff, the project may be done either in the student's place of employment or in some other setting suitable for its accomplishment. Residence in Seattle or at Seattle University would not be required. All degree work must be completed within 5 years of the student's matriculation from the CORPUS Program.

## Graduate Courses

## RS 502 Religious Perspectives in

 Psychology
## 2 credits

Transition and growth in faith from the religion of youth to the religion of maturity; understanding of faith in this process of growth; problems associated with the learning, living and transmission of the Christian message.

RS 505 Introduction to Sacramental Theology 3 credits Use of the conceptual model of religious belonging, and its application by Christianity; deeper understanding of sacrament from historical perspective as well as the experience of living in a faith community.

## RS 506 Communication Workshop

Interpersonal Communication Skills 2 credits Introducing the student to awareness of self and others, development of listening skills, examining barriers to effective interpersonal communication, constructive use of feedback and empathic responding.

RS 507 Communication Workshop:
Conflict Resolution
2 credits
Applying interpersonal communication skills to conflicts within ourselves and between us and others, dealing with fear, ignorance, frustration and violence, alternatives to manipulation and creative alternatives for conflict management.

RS 508 Communication Workshop: Groups and Organizations

2 credits
Clarifying expectations, dealing with conflict in constructive ways, understanding patterns of behavior in groups, reducing defensiveness, alternative ways of building satisfying living/working groups.

RS 510 Introduction to the New Testament 3 credits The nature of revelation; historical backgrounds of the community and its writers, the sacramental and catechetical situations which produced the literary genres of the early gospel tradition.

## RS 511 Modern Trends in Catechetics 3 credits

The problem of faith communication and education, integrate the summer's course in the context of catechetics and develop modern trends in the field of religious education

RS 512 Introduction to Pastoral Ministry 2 credits Meaning of ministry and of pastoral ministry, with further investigation into different styles of ministry now present in the Church, both in traditional ministries and in emerging new ministries.

RS 515 Liturgical Worship and Contemporary Prayer

2 credits
Introduction to the nature and historical forms of liturgy, present directives and contemporary theology of worship. The characteristics of good liturgy. Also some theology on the nature of prayer.

RS 520 Phenomenology of Religion
2 credits
Religion in essence and manifestation in the religious subject and object and their reciprocal operation. The unique contribution of Chardinian concepts in the contemporary world.

RS 525 Religious Perspectives in Sociology 3 credits Systematic inquiry into the complex structure and dynamic function of modern society with emphasis on the religious dimension of culture and its reciprocal relationships.

RS 530 Christ in the Gospel and Tradition 5 credits The development of Christology in the primitive Church, culminating in the theologies of the Synoptics, John and Paul. The development of dogma. Contemporary theologies of Jesus the Christ.

RS 532 Pauline Theology
3 credits
An advanced study of the development of Paul's thought as traced mainly in the great epistles. Certain Pauline themes and motifs will be selected for special study.

RS 535 The Church's Mission to the World 2 credits The Gospel as leaven within and for the world. The Church's developing understanding of her role in the christianization of world process. Contemporary socio-economic problems of America and the world.

RS 540 Christian Self-Image
3 credits
Analysis of contemporary philosophical systems as the intellectual environment in which the Christian message is translated. Influence of philosophers from Kierkegaard through Marcel.

RS 545 The Church as Historically Developing Community

3 credits How the Church arose in the first century by divinehuman processes. What the New Testament says is central to the Church and what is conditioned by the times.


RS 550 Religious Perspectives
in Anthropology
3 credits
Man as the creator of culture and the object of the culture. Religion as a human phenomenon in different times and cultures; implications of this for Catholicism. Anthropological analysis of different cultures.

RS 555 Moral Theology
2 credits
Exploration of the basic premises of law and authority in the moral dimensions of the Church; situation ethics and other moral concerns of man in the 20th Century

| RS 560 | Sacraments: Their Existential <br> Character | 2 credits |
| :--- | :--- | :--- |
| RS 561 | Adolescent Psychology | 2 credits |
| RS 562 | Theology of Hope | 2 credits |
| RS 564 | Theology of Change | 2 credits |
| RS 565 | Problem of God | 2 credits |
|  |  |  |
| RS 568 | Theory of Transactional Analysis | 1 credit |
| RS 569 | Seminar | 2 credits |
| RS 570 | Seminar | 2 credits |
| RS 571 | Seminar | 2 credits |
| RS 572 | Seminar | 2 credits |
| RS 573 | Seminar | 2 credits |
| RS 574 | Seminar | 2 credits |
| RS 575 | Seminar | 2 credits |


| RS 576 | Old Testament Seminar | 2 credits |
| :--- | :--- | ---: |
| RS 577 | New Testament Seminar: Gospels | 2 credits |
| RS 578 | New Testament Seminar: |  |
|  | Epistles and other writings | 2 credits |
| RS 579 | Seminar | 3 credits |
| RS 580 | Practicum Research Thesis | 3 credits |
| RS 590 | Special Topics | $1-5$ credits |
| RS 591 | Special Topics | $1-6$ credits |
| RS 592 | Special Topics | $1-6$ credits |
| RS 596 | Directed Readings in |  |
|  | Religious Education | $2-5$ credits |
| RS 597 | Independent Research | $\mathbf{2 - 5}$ credits |
| RS 598 | Independent Study | $\mathbf{2 - 5}$ credits |

## Corpus Program Courses

## RSM 510 Contemporary Values and Belief

5 credits A study of belief and unbelief in modern society as seen through various disciplines (sociology, psychology, philosophy, theology, etc.) and found in various societal groups and institutions.

RSM 511 Christian Anthropology
5 credits
A contemporary Christian anthropology constructed in light of both the signs of the times and the revealed word and living faith tradition of the Church.

RSM 512 Ecclesiology and Ministry

## 5 credits

 Study of the mission of the Church, past, present and future, the implications this history has for the meaning and practice of ministry today by priest, religious, and lay person.RSM 513 Intra-Personal Workshop

## 4 credits

An assessment of individual ministerial qualities and patterns of behavior as well as the development of new behavioral patterns for effective team ministry.

RSM 514 Inter-Personal Workshop 4 credits Theory and practice in group interactional processes, leadership styles, power utilization and conflict management, and other interpersonal areas having specific ministerial concern.

RSM 515 Organizational Workshop
4 credits A study of team and organizational development in various ministerial settings, including organizational assessment, goal setting, design planning, implementation and evaluation.

RSM 516 Fieldwork

## 2 credits

Twelve to fifteen hours per week in a specific ministry setting under the direction of trained supervisory personnel.

RSM 517 Theological Reflection 1 credit A weekly reflection seminar which integrates the theological and intellectual base of the program with the religious, behavioral and in-service experience of the participants.

| RSM 587 Master's Project | 3 credits |
| :--- | ---: |
| RSM 588 Master's Project | 3 credits |
| RSM 589 Master's Project | 3 credits |
|  |  |
| RSM 591 Special Topics | $1-6$ credits |
| RSM 592 Special Topics | $1-6$ credits |
| RSM 593 Special Topics | $1-6$ credits |



## Albers School of Business

John D. Eshelman, Ph.D., Dean
J.W. McLelland, M.A., Associate Dean

## Department Chairpersons

Accounting and Legal Environment: Gerald L. Cleveland, Ph.D.
Administration: C. Patrick Fleenor, Ph.D.
Economics: Hildegard Hendrickson, Ph.D.

## Degrees Offered

Master of Business Administration (evening classes only)

## Admission Requirements

Students seeking entrance to graduate studies in business should communicate with the Albers School of Business Graduate Admissions Officer .

## Graduate Programs

Master of Business Administration - The degree requires 45 graduate credits beyond the foundation in business and economics courses. A research paper must be completed in an area of concentration. The program is designed to accommodate those with baccalaureate degrees in business and other fields, including Engineering, Arts and Sciences and Education.

## Graduate Courses

Bus 500 Computer Programming 1 credit Computer Programming: fundamentals of flow charting and programming to aid the student in problem solving and research.

Bus 501 Business Statistics 3 credits
Business applications of basic statistics, probability concepts, probability distributions, expectations, sampling, estimation, hypothesis testing, index numbers, time series analysis forecasting techniques and introduction to simple linear models.

Bus 502 Financial Accounting
3 credits
Concepts and principles underlying accounting with special attention to income determination and measurement of assets and equities. Analysis of business performance from accounting viewpoints.

Bus 503 Corporate Financial Theory 3 credits Theory and practice of business finance with emphasis on asset management, capital structure, cost of capital and capital budgeting. Prerequisite: Bus 502.
Bus 504 Marketing Processes

## 3 credits

Introduction to marketing and its functions. Examination of contemporary problems and issues in marketing of goods and services.
Bus 505 Legal Environment
3 credits
Objectives of American legal system, its structure and procedures, dynamics of courts and regulatory commissions. Relationship of law to social change and preservation of society's values; limits of the law's ability to produce change.

Bus 506 Economic Analysis
3 credits
Functioning of mixed market economy. Determinants of aggregate level of income, employment and prices. Forecasting and policy analysis, international aspects.

Bus 507 Organization Behavior
3 credits
Administration process with emphasis on organizational behavior. Basic contributions of social science to the study and practice of management. Analysis of sociopsychological theory and research, decision making, group structure, dynamics and leadership.

Bus 508 Production and Operations Management 3 credits Survey of the system analysis, design and operating techniques for manufacturing and service organizations, topics in facility location, linear programming, inventory control, work measurement, forecasting techniques, scheduling, quality control and network analysis. Prerequisite: Bus 500, 501.

Bus 520 Federal Taxation and Business Decisions

3 credits Introduction to the basic concepts of federal income taxation for the various forms of business organizations, emphasizing the tax implications of various code provisions on business decision making. Prerequisite: Bus 502

Bus 521 Federal Income Taxation of Individual 3 credits Analysis of federal income tax laws as they pertain to the individual taxpayer with emphasis on tax planning techniques. Prerequisite: Bus 502.


Bus 522 Federal Taxation of Partnership and Corporations

3 credits
Analysis of federal income tax as they pertain to partnerships, the corporate taxpayer and shareholders with emphasis on tax planning techniques. Prerequisite: Bus 521.

Bus 523 Taxation of Capital Assets
3 credits
Analysis of federal income taxation of capital assets, utilizing statutes, selected materials and cases to examine special code provisions pertaining to capital assets treatment.

Bus 524 Advanced Corporate Income Taxation 3 credits Analysis of corporate federal income tax laws as they pertain to liquidation and reorganization, personal holding companies and subchapter " S " corporations. Prerequisite: Bus 522

Bus 527 Financial Accounting Theory I 3 credits Examination in depth of the theory and development of generally accepted accounting principles; evolution of theory as it relates to the current state of accounting for the assets of the entity and the measurement and reporting of periodic income. Prerequisite: Bus 502.

Bus 528 Financial Accounting Theory II 3 credits Examination in depth of the theory and development of generally accepted accounting principles; evolution of theory as it relates to the current state of accounting for liabilities and owners' equities.

Bus 530 Managerial Accounting
3 credits
An examination of the basic issues of managerial ac-counting-product costing and information for planning and control decisions - through problem solving case analysis, lecture and class discussion. Prerequisite: Bus 502.
Bus 531 Management Control Systems
3 credits
Nature, structure and processes of management control systems; organization structure, organization objectives, key economic variables, and performance analysis in both profit and not-for-profit organizations
Bus 532 Advanced Managerial Accounting 3 credits
Selected accounting topics; methods of cost estimation, costs for decision models, variance analysis, cost allocations, product costing, direct costing transfer pricing, product pricing, and the behaviora aspects of information for control. Conventiona practices, underlying theory and current developments. Prerequisite: Bus 530

Bus 533 Contemporary Accounting Issues
3 credits Examination of the role of accounting in society; essentials of accounting measurement; formulation of accounting concepts; and the relationship of accounting with other disciplines-economics, law mathematics, information systems, communication theory and behavioral sciences. Prerequisite: Bus 502.

Bus 534 Seminar in Accounting
3 credits
Topics in accounting with emphasis on areas of interest to seminar participants. Such topics as development of accounting principles, audit responsibility, international accounting, governmental accounting, information systems, human resource accounting, and regulatory agencies' impact upon accounting. Prerequisite: Bus 502, and permission.


Bus 535 Advanced Auditing
3 credits
Examination of the changing business environment of the auditor and the impact of these changes on auditing philosophy, objectives and methodology. Prerequisite: Bus 435 or equivalent.

Bus 537 Special Topics 3 credits
Bus 538 Special Topics 3 credits Advanced courses in taxation, managerial accounting, financial accounting and auditing. These courses will be listed in the quarterly class schedule as offered.

Bus 539 Research in Accounting
3 credits
Prerequisite: Bus 534 and permission of adviser.
Bus 540 Managerial Finance

## 3 credits

Cases in business finance that develop students, skill for identifying problems, acquiring relevant actual material and using appropriate financial theory for making decisions in simulated business settings. Prerequisite: Bus 503.

Bus 542 Investments
3 credits
Principles and practices of investments, security analysis and valuation, portfolio management and elements of the investment process. Prerequisite: Bus 540.
Bus 543 Advanced Financial Theory
3 credits Examination of advanced current topics and issues in financial theory using a seminar approach. The course involves readings, discussions and short papers on selected topics. Prerequisite: Bus 540.

Bus 544 Money and Capital Markets
3 credits
Structure of US money and capital markets, the impact of monetary and fiscal policies on the funds flows and interest rates in these markets and the policies of financial institutions participating in these markets. Prerequisite: Bus 506.


Bus 550 Domestic and International Marketing 3 credits Managerial aproach to the study of various policy areas in marketing through the use of case studies. Prerequisite: Bus 504.

Bus 552 Marketing Research
3 credits
Purpose, methods and techniques of marketing research and description of marketing information systems. Prerequisite: Bus 550.

Bus 554 Topics in International Marketing 3 credits Growing importance of international marketing; differences in economic, cultural and political factors between countries, feasibility of using American techniques in performing marketing functions abroad. Prerequisite: Bus 550.

Bus 555 Marketing Communication 3 credits Role of promotion in marketing: functions of personal selling, advertising, sales promotion and publicity and their coordination into an effective promotional mix, evaluation and control of promotion. Prerequisite: Bus 550.

Bus 556 Seminar in Marketing
3 credits Study and research in advanced topics of marketing. The interdisciplinary exchange of ideas related to marketing is studied. The marketing theories and evolving concepts of marketing and management are critically appraised. Prerequisite: Bus 550 .

Bus 559 Research in Marketing
3 credits
Prerequisite: Permission of adviser
Bus 560 Management Information Systems 3 credits Planning, designing, implementing and evaluating commercial systems. Use of programming concepts for data base management. Development of computer-based management information systems and associated problems. Prerequisite: Bus 500.

Bus 561 Survey of Quantitative Methods 3 credits Survey of management science techniques used for business decisions. Decision theory, various mathematical programming techniques, network models and simulation. Prerequisite: Bus 501, 508

Bus 562 Advanced Statistical Analysis
3 credits
Fundamentals of sampling, analysis of variance, non-parametric methods, multivariate and nonlinear regression models, advanced time series analysis. Prerequisite: Bus 501, 508

Bus 563 Quantitative Decision Analysis
3 credits
Techniques including linear programming, curvilinear programming, inventory models, queuing theory, Markow analysis, game theory and network analysis. (PERT, VERT \& CPM) Prerequisite: Bus 562

Bus 564 Operations Analysis
3 credits
Continuation of advanced management science techniques including dynamic programming, simulation, optimality and conjoint analysis, with specific application in the fields of logistics, marketing, finance, production and personnel. Prerequisite: Bus 562

Bus 569 Research in the Operations and Systems Area

3 credits
Prerequisite: Permission of adviser.
Bus 570 Managerial Economics
3 credits
Theory of the consumer, the firm, and the industry, with emphasis on applications to business decision making. Prerequisite: Bus 506.

Bus 574 Advanced Managerial Economics
3 credits Application of economic theory and methodology to business administration practice, using tools and techniques of economic analysis to solve business problems. Prerequisite: Bus 570.

Bus 575 International Business Enterprise 3 credits Economic fundamentals of international trade including the working of the foreign exchange market. National policies and international institutions. Foreign branches and subsidiaries. Multinational corporations. Centrally planned economies. Developing nations. Prerequisite: Bus 506.



Bus 576 Finance for International Business 3 credits
Balance of payments. International investment. Exchange controls. Liquidity and adjustment problems. I.M.F. and possible developments. American payment problems. Special drawing rights. Proposals for international payments systems. Eurodollar market. Prerequisite: Bus 506; 575 recommended.

Bus 577 Business Responsibility/Ethics 3 credits Bases for ethical relationships among economic agents in a mixed market economy. Responsibilities on both sides of such relationships are examined: employer and employee; firm and customer, competitors, stockholder, dealers and suppliers, unions, local communities, and government.

Bus 578 Legal Influences on Business 3 credits
Influence of modern legislation, regulations, and court decisions, with special emphasis on labor law and labor relations.

Bus 579 Research in the Environmental Area 3 credits Prerequisite: Permission of adviser.

Bus 580 Organization Structure and 3 credits Theory
Conceptual understanding of organization structure and functioning. Examination of various forces operating in an organization. Studies from various disciplines to understand the organizational functional and dysfunctional aspects. Introduction of change. Prerequisite: Bus 507.

Bus 581 Human Resource Management 3 credits Problems and policies in personnel philosophy, ethics, implementation of personnel program; directing, appraisal, compensation, training and development of employees. Prerequisite: Bus 580.

Bus 582 Decision Theory
3 credits
Study, analysis and discussion of the total decision making process. Particular emphasis is accorded the interdisciplinary aspect of decision making and the concept of rational decisions. Prerequisite: Bus 508, 580.

Bus 585 Management of Change
3 credits
Process of social change in American society, its impact on the public and organizations, especially the corporation. Problems of technology and culture, ecological awareness, poverty, consumer law, life styles and attitudes toward work. Prerequisite: Bus 580.

Bus 586 Small Business Management 3 credits Procedures and problems in starting and operating a successful small business enterprise. Prerequisite: Bus 530, 540, 550, 580.

Bus 587 Seminar in Management 3 credits Study and research in advanced topics of administrative theory and organizational behavior. Individual or multiple topics will be investigated in depth, with emphasis upon emerging concepts in the field. Prerequisite: Bus 580.

Bus 589 Research in the Behavioral Area

3 credits Prerequisite: Permission of adviser.

| Bus 591 | Special Topics | $1-3$ credits |
| :--- | :--- | :--- |
| Bus 592 Special Topics | $1-3$ credits |  |
| Bus 593 Special Topics | $1-3$ credits |  |
|  | Prerequisite: Permission of adviser. |  |

Bus 595 Business Policy 3 credits
Policy problems faced by chief administrative officers. Determination of objectives; development of policies to achieve objectives; organization of executive personnel to implement policies; coordination of the organization; and adjustments to changes in environment. Case study seminars with simulation (business gaming). Builds upon the Core. Prerequisites: Foundation and Management core courses.

Bus 596 Independent Study
1-3 credits
Bus 597 Independent Study
1-3 credits
1-3 credits
Prerequisite: Permission of adviser.



## School of Education

## Frederick John Gies, Ed.D., Dean

Gary H. Zarter, Ph.D., Associate Dean

## Degrees Offered

Master of Arts in Education
Master of Counseling
Master of Education
Doctor of Education

## Special Non-Degree Programs

A number of programs may be taken in addition to or separately from degree requirements:

For bachelor's degree holders without teacher training: (at least 30 hours must be completed at Seattle University in the following programs to receive our recommendation.)
a) Elementary teaching provisional certification.
b) Secondary teaching provisional certification.
c) Montessori teaching certification.

For bachelor's or master's degree holders with teacher certification or its equivalent:
a) Standard certification (fifth-year); may be either a non-degree program or combined with a master's degree.
b) Provisional principal's credential. Requirements for the principal's credential include: completion of requirements for a standard teaching certificate; 54 credits of course work beyond the bachelor's degree, of which at least 24 credits are to be in an approved program, including administrative internship; and at least three years of
successful teaching at the time the credential is requested. At least one year of successful teaching must have been completed at the time the candidate begins the credential program. Acceptance in Graduate School is a prerequisite.
c) Standard principal's credential. Candidates for the standard principal's credential must have the provisional principal's credential, have completed 12 credits of applicable study since receiving the provisional credential, have a master's degree and have completed three successful years as a school principal. For detailed programs and instructions, consult the Coordinator of Education Administration Programs.
Both principal's credential programs may be combined with the master's degree in Education Administration described below.
d) School counselor's certification.

These certification programs also are commonly combined with the master's degree in counseling described below. See the Coordinator of Counseling and Guidance Programs for details.

## Master's Degree Programs

At the master's level the School of Education offers M.Ed., M.A. and M.C. degrees. The following majors are available:

Curriculum and Instruction-for those planning a career as professional teachers, as instructional leaders, or curriculum specialists. This flexible program permits a variety of specializations, e.g., Reading Specialist, Learning Disabilities, Special Education, Physical Education and Montessori education.

Administration-designed for those desiring to qualify for principalships, school business administration, youth organization leadership and other supervisory positions.
Counseling-prepares professionals for counseling in both school and non-school settings.

Adult Education - for those whose orientation is education in community college, technical school, businesses, or other adult settings.

In addition to graduate degree programs the School of Education offers post-bachelor and fifth year programs leading to provisional or standard teaching certificates and post-masters programs designed to upgrade inservice educators and lead to principal, supervisor, or counselor credentials.

Several other masters programs are available at Seattle University outside the School of Education including Religious Education, Business and Public Service. Teachers wishing to combine some courses from graduate fields offered by Seattle University along with selected professional education courses should pursue the major in Curriculum and Instruction which permits such a combination.

## Admission Requirements

1. Relevant Post-Bachelor's work experience, at least one year, is required for all programs. The work must be in the type of institution or agency in which the student plans to utilize the graduate training.
2. For Non-business School Administration or Curriculum and Instruction majors, academic background equivalent to that required for a teaching certificate is necessary.
3. For Counseling majors the equivalent of an undergraduate major in any one of the following is needed: Education, Psychology, Sociology, Social Work or Community Service.
4. Students meeting the above standards who have at least a 2.75 cumulative or upper-division grade point average are acceptable as regular degree applicants. Those below a 2.75 but above a 2.30 grade point average may be accepted as probationary degree applicants upon submission of test scores and recommendations. Those accepted on probation must remove all conditions of probation before completing over 15 hours of degree work at Seattle University.

## General Format of Degree Studies

Below are typical programs for each major field. While details vary from program to program, all Education graduate degree programs contain the following components:

1. Admission - as degree "applicant." (See above.)
2. Initial course work - 15 hours of course work to include Ed 500, Introduction to Research and Graduate Studies, plus the designated first course in the major field and other courses designated at admission or by the program adviser.
3. Candidacy-admission to degree Candidate status, is based on these criteria:
a) A 3.00 (B) average in the first 15 hours.
b) Recommendation of your on-the-job supervisor. (We will request this from your supervisor.)
c) Recommendation of your major program Adviser.
d) Submission of a planned program of studies approved by your adviser.
4. Advanced course work:
a) Completion of major field course work. The amount varies from program to program and student to student. See below for typical programs for each major.
b) Complete core and approved electives. M.Ed. candidates must complete at least 48 credits; M.A. candidates must complete at least 45 credits, including either a three credit project or a 10 credit thesis. Master of Counseling candidates must complete at least 60 credits.
c) In the programs involving a required practicum or internship there are two evaluation points beyond initial admission: at candidacy and just prior
to the practicum or internship to further determine the candidate's capabilities to function effectively in the practicum or internship role.
5. Comprehensive exam - satisfactorily complete a written comprehensive exam covering the major area of study. The exam may be taken as soon as all major area course work is completed and must be taken immediately once all degree course work is completed. The examination is offered at least three times each year.

## Some Details of Interest

1. Transfer credit. A student may transfer 10 quarter hours to Seattle University as part of a masters program provided:
a) student shows evidence that it was true graduate credit acceptable toward a graduate degree at the accredited university where it was taken; (Special rules apply to 400 -level credit);
b) the work fits within applicable time limits, normally within six years prior to the completion of the degree;
c) it is approved by the adviser and the deans;
d) grades must be B or above.

Majors in Curriculum and Instruction may exceed the 10 -hour limit with advance approval of the adviser and deans when a group of electives exceeding 10 hours is desirable but not available at Seattle University.
2. Time limit. All degree work must ordinarily be completed within six years. This limit includes transfer credit.
3. Residency requirement. At least one full quarter must be spent in full-time study, preferably the first summer quarter. Remaining work may be done either full-time or on a part-time basis during summers or in late afternoon and evening sessions during the year or both. Nine hours or more per quarter constitutes full graduate study. Students for whom the residency requirements is a severe hardship may apply in writing for a waiver.
4. Enrollment limits for fully employed students. Anyone holding full-time employment is ordinarily limited to six hours per quarter. (This may be exceeded when added courses are an integrated part of the working day, e.g., internship, certain independent study courses, and certain graduate projects.)
5. A $\mathbf{3 . 0 0}$ grade point average must be maintained during graduate study.
6. Combining degree work and certification programs By careful planning the student may combine degree work with a program leading to the standard teaching certificate, the provisional principal's credential, or a counselor's certificate.
(Please note: Students who choose to pursue a fifth year toward the provisional or standard teaching certificate but not the masters degree shall not enroll in the Graduate School but should enroll directly in the School of Education as "Fifth-Year" students. Such students develop a planned program with an adviser from courses numbered 100-499. A few introductory 500 -level courses may be included with advance approval of the adviser and dean.)

## Masters Program in Education Administration

Robert E. Lowery, Ed.D., Coordinator

## Typical Programs

## Principalship

## Required Courses:

1. Ed 500 - Introduction to Research and Graduate Studies
2. One of: Ed 501 - Philosophy of Education Ed 503 - Comparative Education
3. Ed 581 - Fundamentals of Administration
4. One of: Ed 522-Child Psychology-Learning Ed 523-Adolescent Psychology-Learning
5. Ed 536 - Supervision of Instruction

## Typical Major Courses:

Ed 583 - School Finance
Ed 584 - Education Law
Ed 586 - Professional Personnel
Ed 596 - Administrative Graduate Project
Ed 590 - Administrative Internship I
Ed 591 - Administrative Internship II
Ed 592 - Administrative Internship III

Typical Electives (Normally 9 to 12 credits from such courses as the following and will vary greatly from student to student.)

Ed 510 - Fundamental Counseling Skills
Ed 541 - Curriculum Trends and Issues
Ed 572 - Foundations of Adult Education
Ed 530 - Administration Problems Seminar
Ed 587 - Community Relations
Ed 597 - Independent Study in Educational Administration

## School Business Administration

## Required Courses:

Ed 500 - Introduction to Graduate Study
Bus 581 or Ed 501 or 503 - Foundation Study
Ed 596 - Graduate Field Project
Bus 507 or Ed 581 - Organization and Administration
Ed 593 - School Business Office
Ed 594 - Facilities, Transportation, Food Services
Ed 595 - Critical Programs, Bargaining
Ed 590, 591, 592 -- Internship
Nine (9) Credits From Among:
Ed 583 - School Finance
Ed 584 - Education Law
Ed 586 - Professional Personnel
Ed 587 - Community Relations
Ed 588 - Professional Communications

Six (6) Credits From Among:

Bus 501 - Business Statistics
Bus 502 - Financial Accounting
Bus 503 - Corporate Financial Accounting
Bus 530 - Management Accounting
Bus 531 - Management Control Systems
Bus 560 - Management Information Systems
Bus 580 - Organizational Structure and Theory

## Administration of Youth and Recreational Organizations

Required Courses:
Ed 500 - Introduction to Graduate Study
Ed 522 or 523 or 573 -
Child, Youth, or Adult Psychology
Ed 581 - Fundamentals of Organization and Administration
Ed 582 - Foundation Study: Service Organizations

## Typical Major Courses:

Ed 584 - Education Law
Ed 586 - Professional Personnel
Ed 587 - Community Relations
Ed 588 - Professional Communications
Ed 589 - Operation and Finance of Youth Organizations
Ed 590-1-2 - Internship
Ed 596 - Graduate Field Project
Ed 598 - Specialized Problems Seminars

- Graduate Electives

Masters Program in
Adult Education
Charles A. Yackulic, M.A., Coordinator
Typical Program - 45-Hour Plan
Required Courses:

1. Ed 500 - Introduction to Research and Graduate Studies
2. One of: Ed 501 - Philosophy of Education Ed 503 - Comparative Education
3. Ed 572 - Foundations in Adult Education

Typical Major Courses:
4. Ed 573 - Special Problems of Adult Learner
5. Ed 574 - Administration of Adult Education Programs
6. Ed 575 - Course Development and Instructional Resources
7. Ed 579 - Adult Education Graduate Project

Typical Electives:
Ed 576 - Job and Task Analysis
Ed 513 - Principles of Counseling
Ed 578 - Adult Education Practicum
Ed 506 - Educational Statistics
Ed 540 - Fundamentals of Curriculum Development
An elective sequence in Alcohol Studies may be incorporated into this program.

# Masters Program in Counseling <br> Marylou Wyse, Ph.D., Coordinator 

Typical Program—School or General Counseling 45-Hour Plan

## Required Courses:

1. Ed 500 - Introduction to Research and Graduate Studies
2. One of: Ed 501 - Philosophy of Education Ed 503 - Comparative Education
3. Ed 510 - Fundamental Counseling Skills

## Typical Major Courses:

Ed 512 - Counseling and Informational Sources
Ed 513 - Counseling Theories
Ed 527 - Tests and Measurements 1
Ed 528 - Tests and Measurements 2
Ed 551 - Counseling Practicum
Ed 559 - Counseling Graduate Project
Ed 564-5 - Counseling Internship I and II

## Typical Electives:

Ed 517 - Group Counseling
PE 484 - The Drug Scene
Ed 515 - Multicultures
Ed 522 - Child Psychology-Learning
Ed 560 - Family Counseling
An elective sequence in Alcohol Studies may be incorporated into this program.

## School Counseling

In addition to the required and typical major courses shown above those preparing for state school counseling certification must include the following in their programs:

Ed 424 - Introduction to Learning Disabilities
Ed 509 - Developmental School Counseling
Ed 517 - Group Counseling
Ed 522 or 523 - Child or Adolescent Psych/Learning

## Career-Vocational Counseling

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## Community Mental Health Counseling ( $60 \mathrm{cr} . \mathrm{M} . \mathrm{C}$.)

## Required Courses:

Same as previously stated for all Counseling specializations.

## Typical Major Courses:

Psy 415 - Advanced Psychopathology
Ed 512 - Counseling and Informational Services
Ed 513 - Counseling Theories
Ed 517 - Group Counseling
Ed 518 - Group Counseling Practicum
Ed 522 or 523 - Child or Adolescent Psychology
Ed 527 - Tests and Measurements 1
Ed 527 - Tests and Measurements 2
Ed 551 - Counseling Practicum
Ed 558 - Community Mental Health Practicum
Ed 560 - Family Counseling
Ed 564, 5, 6 - Counseling Internship 1, 2, 3

## Masters Program in Curriculum and Instruction

Margaret Haggerty, Ph.D., Coordinator

## Typical Program - 45-Hour Plan Required Courses:

1. Ed 500 - Introduction to Research and Graduate Studies
2. One of: Ed 501 - Philosophy of Education

Ed 503 - Comparative Education
3. Ed 540 - Fundamentals of Curriculum Development
4. One of: Ed 522-Child Psychology-Learning Ed 523-Adolescent PsychologyLearning

## Typical Major Courses:

Ed 530 - Practicum in Curriculum Design
Ed 536 - Supervision of Instruction
Ed 537 - Curriculum Independent Study
Ed 541 - Curriculum Trends and Issues
Ed 538 - Curriculum Field Study
Ed 539 - Curriculum Graduate Project
Electives: (approximately 18 hours)
a. Specialty areas such as reading, learning disabilities, special education, Montessori education, elementary methods, (if the desired, approved courses are not available at Seattle University, they may be taken elsewhere.)
b. Courses from other Graduate Education majors: Administration, Adult Education, Counseling.
c. An academic area such as English, foreign language (French abroad with intern teaching), history, business, art, physical education. Courses must be 400 level or above.

## Reading Resource Specialist or Special Education

Specializations in reading or two areas of special education may be completed as part of the master's degree program described in Curriculum and Instruction. Each may also be pursued as an area of specialization leading to a university certificate of completion upon completing the following:

## Reading Resource Specialist (15 hours)

Ed 534 - Seminar in the Teaching of Reading
Ed 533 - Reading Diagnosis and Evaluation
Ed 535 - Reading in Content Fields
Ed 531 - Individualizing Reading Instruction
Ed 532 - Field Practicum in Readina
Ed 543 - Corrective Techniques in the Teaching of Reading

## Learning Disabilities/Behavior Disorders Specialist (21 hours)

Ed 428 - Language Development
Ed 510 - Fundamental Counseling Skills
Ed 524 - Seminar in Behavior Disorders
Ed 547 - Diagnosis and Prescription
Ed 552 - Learning Disability Special Methods
Ed 555 - Practicum
Ed 556 - Class Management
Ed 424 and 425 or their equivalents are prerequisites to this program.

## Comprehensive Special Education (27 hours)

Ed 510 - Fundamental Counseling Skills
Ed 524 - Seminar in Behavior Disorders
Ed 546 - Seminar in Mental Retardation
Ed 428 - Language Development
Ed 547 - Diagnosis and Prescription
Ed 552 - Learning Disability-Special Methods
Ed 545 - Special Methods in Mental Retardation
Ed 556 - Class Management
Ed 555 - Practicum
Ed 424, 425 and 426 or their equivalents are prerequisites to this program.

## Doctor's Degree Program

John A. Morford, Ed.D., Coordinator

Seattle University offers a three-year, 90 credit program leading to the Doctor of Education (Ed.D.) degree with a major in Educational Leadership designed for practicing leaders in education who may complete it while continuing employment.
Designed to meet the needs of a broad spectrum of leaders in education, the program includes a common core of studies in educational leadership theory and practice and courses, internships, projects, and independent studies oriented toward the specific needs of each student.

## ADMISSION INFORMATION

Admission Standards: (minimum for consideration)

1. Master's degree from an accredited university
2. Positive recommendations for doctoral study from:
a. Master's degree major professor
b. Immediate supervisor on-the-job
3. One of the following test scores:
a. GRE verbal of 500 or
b. GRE aptitude total of 900 or c. MAT of 40
4. A 3.5 GPA in master's degree program courses
5. Three years successful educational experience (in schools or other agencies), including at least one year in a leadership role
6. A personal interview with two SU faculty members

For details on admission procedures please call 6265416 and obtain a packet of materials.

RESIDENCY - Full time residency is not required; however 32 credits must be completed in the first 13 months including Ed 600, 601, and 604 (see description within). The program is designed for completion within three years by those continuing in leadership positions. Students going beyond three years will continue to register for the Ed 603 Seminar as long as actively seeking the degree. Also, if a student exceeds three years, added doctoral project credit registration is required; 2 credits in the fourth year and 10 credits per year in the fifth and succeeding years. Formal "leaves" may be granted for cause. Credit applied to the degree may not be over 6 years old when the program is completed.

## COMPONENTS OF THE PROGRAM - 90 credits total

1. Ed Leadership major $($ required) $=27$ credits
a. Ed 600 Workshop in Ed Leadership 9 credits
b. Ed 601-2-3 Seminar in

Ed Leadership I, II, III 5 credits each
c. Ed 604 Workshop in

Organizational Development 3 credits and Change
2. Cognate Study and

Professional Education $\quad=39$ credits
a. Amounts within the two categories will vary greatly with student background and need; however normally a minimum of 12 each will be required.
b. Cognate studies may be in any field other than Education, e.g., business, political science, public service, history, philosophy, psychology, sociology, religion, English.
c. Unless already completed the following or equivalents must be included: Ed 510, Fundamental Counseling Skills or Ed 513. Theories of Counseling; Ed 527, Tests and Measurement 1 or Ed 547, Diagnosis and Prescription; Ed 536, Supervision; Ed 540, Foundations of Curriculum; Ed 583, School Finance; and Ed 584, Education Law. For persons from non-school agencies, equivalent courses from other fields may be substituted with permission.

## 3. Independent Study, Internship, Project $=24$ credits

a. Independent Study $=4-15$ credits

1) Internship

Available to all; required if student hasn't completed a graduate level internship or practicum.
2) Other Independent Study as needed to bring total to 90 credits.
b. Doctoral Project $=9-20$ credits

SEQUENCE OF PROGRAM - The following is a typical sequencing:

| Ed Leadership | $\begin{gathered} \text { Sm } 1 \\ 9 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{Yr} 1 \\ 5 \\ \hline \end{gathered}$ | $\begin{array}{\|c} \mathrm{Sm}_{3} 2 \\ \hline \end{array}$ | $\begin{gathered} \mathrm{Yr} 2 \\ 5 \\ \hline \end{gathered}$ | Sm 3 | $\begin{gathered} \mathrm{Yr} 3 \\ 5 \\ \hline \end{gathered}$ | $\begin{array}{\|c} \text { Total } \\ 27 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cognate |  | 3 | 3 | 3 | 6 | 3 | 18 |
| Prof. Ed. |  | 6 | 3 | 6 | 3 | 3 | 21 |
| Ind. Study | -----------4-15 ----------- 4 -15 |  |  |  |  |  |  |
| Project | ------------9.20 -----------9.20 |  |  |  |  |  |  |
| TOTALS | 9 | 14 | 9 | 14 | 9 | 11 | 90 |

## OTHER DETAILS OF INTEREST

1. Prerequisites - Graduate Study in Research, Foundations of Education, and Child or Adolescent Psychology. If not completed prior to enrollment, these could be completed within the first academic year but are in addition to the 90 doctoral degree credits.
2. TRANSFER CREDIT - (max 15 qr. hrs.) a) Must have been taken after completion of a master's degree and have been applicable to at least a master's degree at the fully accredited university which offered it. b) No more than 6 transfer credits may be below 500 level. c) Must be "A" or "B" grades.
3. Credit at SU - a) At least three-fourths of the applicable credits taken at SU must be 500 or higher level. b) In any case, no more than 21 credits at SU below the 500 level may be applied and then only with specific, advanced, written approval of the doctoral committee. (Inclusion on an approved Program of Studies will satisfy this requirement.) c) All credit applied to the Ed.D. must have been completed within 6 years prior to the date on which all requirements for the Ed.D. are satisfied.
4. Formal degree candidacy - Degree candidacy is attained when, a) Ed 604 has been completed, b) a program of studies has been approved, and c) a project proposal has been accepted.
5. Comprehensive Exam - An 8-12 hour exam is required of all during the Spring Quarter of Year 3. It consists of a 4 hour exam on educational leadership common to all students and an individualized 48 hour exam tailored to each student's program, cognate fields and project.

## Graduate Courses

Ed 500 Introduction to Research and Graduate Study 3 credits Introduction to research skills and literature in students' fields. Includes an orientation to graduate studies. Ordinarily taken as first graduate course. (fall, winter, spring, summer)

Ed 501 Philosophy of Education
3 credits
Philosophical foundations of education and related fields. (fall, winter, summer)

Ed 503 Comparative Education 3 credits Investigation and comparison of the leading national and cultural systems of education of the world. (spring, summer)

Ed 505 Fundamentals of Research Design 3 credits Statistical techniques used in research design, measurement and evaluation. Emphasis on utilizing the computer in solving research problems.

Ed 506 Educational Statistics
3 credits Specialized utilization of statistical data analysis and application to research.

Ed 509 Developmental School Counseling 3 credits Emphasizes expanded role of the school counselor as psychological educator, consultant and systems change agent. Studies models of these functions and promotes application to student's school setting.

Ed 510 Fundamental Counseling Skills
3 credits
Focus on basic counseling skill training through intensive small group practice. Designed to complement Education 513, Counseling Theories, which should be taken concurrently. (fall, summer)

Ed 511 Organization and Administration of Counseling Services

3 credits
Consideration of the various counseling services offered in schools with particular reference to their organization and administration as well as the ethics and legality involved. (fall)

Ed 512 Counseling and Informational Sources

3 credits
Study of vocational development. Exploration of educational, social, vocational and referral sources. (spring, summer)

Ed 513 Counseling Theories 3 credits
Theoretical foundations of major counseling approaches with opportunities for in-class practice in simulated counseling interview. Complement to Education 510, which should be taken concurrently. (fall, summer)

Ed 514 Contemporary Issues in Counseling 3 credits Critical exploration of current controversial concerns in the field of counseling conducted in seminar style. Prerequisite: Ed 513.

Ed 515 Multicultures 3 credits Examination of a wide variety of cultures with implications for helping professions

Ed 516 Psychology of Careers 3 credits In-depth exploration of vocational theories. Familiarization with vocational tests and inventories. (winter)

Ed 517 Group Counseling - Theory
and Procedures 3 credits
Emphasizes group counseling theory. Provides group experiences (including required twelve hour marathon) to integrate theory and procedures. Discusses possible applications. Prerequisite Ed 510, 513. (winter)

## Ed 518 Group Counseling Practicum

3 credits
Supervised experience co-leading groups. Weekly seminar includes class as group experience. Limited enrollment. Formerly Ed 550. Prerequisites: Ed 517.

Child Psychology/Learning
3 credits
Investigation of various theories of child development and learning.

Ed 523 Adolescent Psychology/Learning 3 credits Investigation studies in adolescent psychology and learning.

Ed 524 Seminar in Behavior Disorders 3 credits Overview of practices and rationales in the education of the emotionally disturbed child. Structuring of individualized remedial programs and techniques which utilize existing agencies and personnel.

Ed 525 Psychology of Learning Seminar 3 credits Investigation, analysis and reporting on original studies in the field of learning; includes a report on an investigation of some specific phase or problem. Prerequisite: Ed 325.

Ed 527 Tests and Measurements 1
3 credits Familiarization with measurements concepts and commonly used tests via participant test-taking and analysis. Extra lab time required. (winter, summer) Prerequisite: Ed 506.

Ed 528 Tests and Measurements 23 credits Emphasis on the administration of appropriate tests to clients and practice synthesizing test data with other information for useful feedback to clients. Extra lab time required. (spring, summer) Prerequisite: Ed 527.

Ed 529 Teaching Values in American Schools $\mathbf{3}$ credits Psychological foundations of character development, will-training, values, nature of morality, the relation of character to education and studies in character education.

Ed 530 Practicum: Curriculum Design 3 credits For teachers and supervisors, kindergarten through college. Provides an opportunity for experience in program/course development. Prerequisite: Ed 540.

Ed 531 Individualizing Reading Instruction $\mathbf{3}$ credits The history, theory and background of individualized reading; emphasis on the eclectic approach and flexibility in classroom organization.

Ed 532 Field Practicum in Reading 3-6 credits Supervised field experience in diagnosis and teaching of reading. Prerequisite: Ed 533 or equivalent.

Ed 533 Reading Diagnosis and Evaluation 3 credits Diagnosis of reading difficulties; tests, reading inventories, classroom techniques and materials; clinical programs and approaches. Prerequisite: Ed 534 or equivalent. (summer)

Ed 534 Seminar in Teaching of Reading $\mathbf{3}$ credits Development of reading skills at all levels; examination and evaluation of current reading practices and programs. Prerequisite: Ed 336 or 337 or equivalent.

Ed 535 Reading in Content Fields
3 credits
Decoding and vocabulary analysis, comprehension, reading rate, study skills and reading interests as related to specific content fields. Prerequisite: Ed 336 or 337 or equivalent or permission of instructor. (summer)

Ed 536 Supervision of Instruction 3 credits Improvement of instruction through supervisory leadership.

Ed 537 Curriculum Independent Study $1-4$ credits Library research in curriculum. Approximately 30 hours of reading and allied assignments per credit. Reports will include analysis and critical appraisal of materials read. Prerequisite: Permission of adviser. Graduate students only. (fall, winter, spring, summer)
Ed 538 Curriculum Field Study
3 credits
Scholarly study and reporting of a curriculum field problem. Emphasis on application of completed research and design to an actual situation. Prerequisite: Approval of Coordinator. (fall, winter, spring, summer)

Ed 539 Curriculum Graduate Project 3 credits Scholarly graduate project designed to improve some aspect of education. Prerequisites: Graduate core requirements and approval of adviser.

Ed 540 Fundamentals of Curriculum Development

3 credits Historical, philosophical foundations, principles, types and methods of curriculum development and organization. (fall, summer)

Ed 541 Trends and Issues
3 credits
Investigation and analysis of changes and trends, including a personal intensive report on some phase of curriculum development.

Ed 543 Corrective Techniques in the Teaching of Reading

3 credits Identification of components of effective corrective reading programs; description and application of specific methods and materials; evaluation and design of corrective reading approaches.

Ed 544 Advanced Workshop in Curriculum Methods

3 credits
Provides an opportunity for experienced workers in elementary/secondary education to pursue individual studies in curriculum, teaching methods and related fields.

Ed 545 Special Methods in Mental Retardation 3 credits Educational provisions for the retarded affected by environmental deprivation, sensory and/or other impairments. Prerequisite: Ed 546.

Ed 546 Seminar in Mental Retardation 3 credits Investigation, analysis and reporting on studies and trends in education of the mentally retarded. Prerequisite: Ed 426 or equivalent.

Ed 547 Diagnosis and Prescription 3 credits Comparison of various methods used in the diagnosis of learning problems. Selection, administration, and analysis of tests plus writing educational prescriptions. Prerequisite: Ed 424.

Ed 549 Organization of Learning Resource Centers

3 credits Theory, objectives, design and administration of learning resource centers. Individualized application to specific school settings. Prerequisite: Ed 330 or permission.

Ed 551 Counseling Practicum 3-6 credits Supervised counseling experience wherein the counselor candidate is responsible for actual counseling cases. With supervision. Prerequisite: Ed 510, 513. Graduate students only. Maximum of 3 credits per quarter. (fall, winter, spring, summer)

Ed 552 Learning Disabilities:
Special Methods
3 credits
Focus is on methods of instruction of children with extreme learning problems including diagnosis and prescriptive teaching, multisensory systems, phonic systems, language development systems. Prerequisite: Ed 547.

Ed 555 Practicum: Special Education 3-6 credits Diagnostic and prescriptive teaching with children who have learning or behavior problems. Laboratory course.

Ed 556 Class Management
3 credits
Critical analysis of several management systems such as operant discrimination learning, reality orientation, life space interviewing.

Ed 557 Counseling Independent Study 1-3 credits Intensive reading and field research in a topic agreed on by adviser and student. 30 hours work per credit. Graduate students only. Prerequisite: permission of adviser. (fall, winter, spring, summer)

Ed 558 Community Mental Health Practice 3 credits An examination of organization, clientele, and functions of community mental health agencies. Focus on clinical assessment, case conceptualization and management. (winter)

Ed 559 Counseling Graduate Project 3 credits Investigation of some practical aspect of the counseling field. Mandatory for Master of Arts in Education degree. Prerequisite: permission of adviser. Graduate students only. (fall, winter, spring, summer)

Ed 560 Family Counseling 3 credits Demonstration/discussion focusing on dysfunctional families including theoretical and practical applications. (spring)


Ed 567 Seminar in On the Job Training 3 credits Opportunity is provided to discuss the computer analysis of Task Inventories. Development of job related performance standards and models for validating the results.

Ed 568 Adult Education Field Practicum 3 credits Problem centered practicum in a service delivery setting with clients. Joint university and employer supervision and seminar evaluations.

Ed 569 Seminar in Community Development 3 credits Basic concepts related to community service delivery systems with emphasis on psychosocial and cultural factors related to user participation. Data gathering techniques, education and public relations are used as the instruments of planned change.

Ed 570 Seminar on the American Community College

3 credits
Consideration of the college parallel, vocational, technical and community service roles; history, status and projected development of community colleges; staffing needs and qualifications. (summer)

Ed 571 Seminar on Community College Instructional Problems

3 credits Identification of instructional programs pertinent to the community college; contrasts with and similarities to problems associated with senior institutions; trends in curricula, personnel and selection. (summer)

Ed 572 Foundations in Adult Education 3 credits Place of adult or continuing education in the total spectrum of American education. Required of the candidate for the Masters in Adult Education. Administration. (fall, summer)

Ed 573 Special Problems of the Adult Learner 3 credits Characteristics of various adult groups and related instructional problems with suggested approaches. Skill acquisition, transfer of training principles, alcohol and other addictions are studied. (winter, summer)

Ed 574 Administration of Adult Education
Programs 3 credits

Problems relating to the development, financing, staffing, supervision and evaluation of instructional programs for adults. (spring, summer)

Ed 575 Course Development and Instructional
Resources 3 credits
Organizing a course of instruction for adults in the candidate's area of competence; collecting and editing supplementary materials; compiling a bibliography and proposing an evaluation design. (fall, winter, spring, summer)

Ed 576 Occupational Analysis and Job Information

3 credits Job and Task Analysis applied to occupational classification, selection and promotion in industry and government. Construction and review of Task Inventories. Implications for career ladders, career counseling, curriculum development, personnel selection tests, job standards and task data banks.

Ed 577 Adult Education Independent Study 1-3 credits Library research in adult or vocational education. Approximately 30 hours of reading and allied assignments per credit. Reports include analysis and critical appraisal of materials read. Prerequisite: Prospectus approved prior to registration. (fall, winter, spring, summer)


Ed 578 Adult Education Field Internship
3-6 credits
Field internship in the specialty area of the graduate student seeking a degree in Adult Education. At least 30 hours of pre-arranged experience is required for each hour of credit.

Ed 579 Adult Education Graduate Project 3 credits Scholarly graduate project designed to improve some aspect of education. Prerequisites: graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)

Ed 580 Special Topics in
School Administration
3 credits
Contemporary problems and trends; analysis and evaluation. Graduate students only.

Ed 581 Fundamentals of Organization and Administration 3 credits Administration theory, style, criteria, responsibilities, process and management by objective. (fall and summer)

Ed 582 Foundation Study: Service Organizations 3 credits Youth and recreation organizations. History, development, philosophies, purposes, constituency, community involvement, values and ethical systems. (fall and summer)

Ed 583 School Finance
3 credits
Historical development; balanced taxation; school support program; problems and controversies. Graduate students only. (spring, summer)

Education Law
3 credits
Federal and state laws regarding public and independent schools and other youth serving organizations; liability; legal status of personnel; case precedents. (winter, summer) and patron planning; leadership of principal. Graduate students only. (biennially)

Ed 586 Professional Personnel
3 credits
Selection, assignment, evaluation, competency maintenance; positive personnel climate, rights, responsibilities, grievances and bargaining procedures. (winter and summer)

## Ed 587 Community Relations

3 credits
Purposes and media for informing the general public and patrons about programs and needs; roles of professional personnel and administrators. (fall, summer)

Ed 588 Professional Communications
3 credits
Analysis of need and appraisal of effectiveness of communications with both internal and external publics; includes skill development in oral, written, and non-verbal communication. (spring, summer)

Ed 589 Operation and Finance, Youth and Recreation Organizations

3 credits
Structural, operational and financial characteristics of recreation organizations. (winter)

## Ed 590 Administrative Internship I 3 credits <br> Ed 591 Administrative Internship II 3 credits <br> Ed 592 Administrative Internship III 3 credits

Supervised experiences in building or program administration. Prerequisites: Course work in administration and permission at least one full quarter prior to start of internship. Required for credentials. Graduate students only. (fall, winter, spring, summer)

Ed 593 School Business Office
3 credits
Legal and procedural factors in school budgeting, expending, accounting, auditing, planning policy, program budgeting and community reporting. (summer)

Ed 594 Facilities, Transportation and
Food Services
3 credits
Planning, supervising and maintenance of transportation, food services and plant facilities. Emphasis on effectiveness, attractiveness, safety and health. (spring)



Ed 595 Administration of Critical Programs and Regulations

3 credits
Study of key federal and state agencies that have regulatory relations and reporting requirements. Collective bargaining. (fall)

Ed 596 Administrative Graduate Project
3 credits Scholarly graduate project designed to improve some aspect of professional assignment. Prerequisites: Graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)

Ed 597 Administrative Independent Study
3 credits Intensive library research. Approximately 30 hours of reading and allied assignments for each credit. Completion reports will include analysis and critical appraisal of materials read. Prerequisite: Permission of adviser. (fall, winter, spring, summer)

Ed 598 Administration of Youth and Recreational Organizations

3 credits Problem seminars on topics relating to the administration of youth and recreational organizations. Master of Arts in Education candidates. Prerequisites: Graduate core requirements and approval of preliminary application by the graduate adviser and Graduate Dean.

Ed 600 Workshop in Educational
Leadership 9 credits
An integrated four-week workshop in educational leadership. Includes theoretical and practical study of leadership in educational institutions. Required first course in the Ed.D. program. (summers only)

| Ed 601 | Seminar in Ed Leadership I | 5 credits |
| :--- | :--- | ---: |
| Ed 602 | Seminar in Ed Leadership II | 5 credits |
| Ed 603 | Seminar in Ed Leadership III | $3-5$ credits |

Studies of issues and problems in educational leadership. Five credits per academic year are required in each of the first three years with three credits required each year thereafter as long as the student is active in the Ed.D. program.

## Ed 604 Workshop in Organizational Development and Change

 3 creditsIntegrated workshop relating to organizational development, conflict management. Required during the second summer in the Ed.D. program.

Ed 605 Independent Study in Ed Leadership $1-5$ credits
Ed 606 Independent Study in Ed Leadership $1-5$ credits
Independent Study in Ed Leadership
$1-5$ credits
Ed 608 Internship in Ed Leadership 3-9 credits
Planned internship in a leadership position in an actual educational setting under the supervision of an experienced leader and an SU supervisor.

Ed 610 Doctoral Project
9-20 credits
A doctoral level project completed under the supervision of a project committee and a major professor. A minimum of nine and a maximum of 20 credits are required for the Ed.D. degree. Quarterly registration will range from $2-4$ credits as approved by the adviser.



## Health and Physical Education

Joseph T. Page, Ph.D., Chairman

## Degrees Offered

Master of Education
Master of Arts in Education

## Departmental Requirements

Master's Degree in Curriculum and Instruction Emphasis in Physical Education - Graduate study is structured within the area of Curriculum and Instruction. A total of 18 credits ( 6 courses) out of 45 required is devoted to the Physical Education course area.

## Masters Program in Curriculum and Instruction with Emphasis in Physical Education

## Typical Program-45-Hour Plan Required Courses:

1. Ed 500 - Introduction to Research and Graduate Study
2. One of: Ed 501-Philosophy of Education

Ed 503-Comparative Education
3. Ed 540 - Fundamentals of Curriculum Development
4. One of: Ed 522-Child Psychology-Learning Ed 523-Adolescent Psychology Learning

## Typical Major Courses:

[^1]
## Physical Education Emphasis:

10. PE 480-Current Issues in Physical Education<br>11. PE 500-Administrative Process in Physical Education<br>12. PE 550-Practicum Experience in Physical Education<br>13-15. Three Selected From:<br>PE 482-Historical Foundations of Physical Education<br>PE 484-The Drug Scene<br>PE 486-Women in Sport<br>PE 488-Sports and American Culture<br>PE 410-Perceptual Motor Development<br>PE 525-Seminar: Motor Learning

## Health and Physical Education Courses

## PE 480 Current Issues in Physical Education 3 credits

 Trends and factors influencing physical education and other movement-oriented programs; implications for meeting student and community needs in implementing programs in schools and colleges.PE 482 Historical Foundations of
Physical Education
3 credits
Traces the historical development of physical education and athletics from the early societies to modern culture. Emphasis on current applications.

PE 484 The Drug Scene
3 credits
A survey of the misuse and abuse of licit and illicit drugs. Scientific information for concerned school personnel presented by professional people working with drug problems and users.

PE 486 Women in Sport
3 credits
A historical sociological and biophysical approach to women in sport with emphasis on concepts, impacts and implications related to American and World culture, past, present, and future.

PE 488 Seminar: Sports and American Culture 3 credits Reviews development and purposes of intercollegiate, interscholastic and professional sports. Focuses on issues, problems, opportunities and challenges, particularly for minorities.

PE 491 Special Topics
1-5 credits
(fall, winter, spring, summer)
PE 498 Independent Study
1-5 credits
PE 500 Administrative Process in
Physical Education
3 credits
Organizational patterns of physical education in secondary and higher education. Stress on management processes and techniques essential to administrative action. Prerequisite: Permission of instructor.

PE 525 Seminar: Motor Learning
3 credits
Exploration of theories of Human Motor Learning. motor-learning models and research relating to learning of perceptual motor skills. Prerequisite: Perceptual Motor Development or equivalent.

PE 550 Practicum Experience in

## Physical Education

3 credits Selected individual responsibilities with youth groups ranging from pre-school to University popuIation. Prerequisite: Permission of Instructor.


School of Science and Engineering
Gary A. Zimmerman, Ph.D., Dean

## Master of Transportation Engineering <br> Harry Majors, Jr., Director

## Objective

The purpose of this program is to offer a broad perspective of all modes of transportation, recognizing the current panorama of critical issues in moving people and goods under social, political, economic, technological and environmental constraints.

## Degree Offered

Master of Transportation Engineering
Certificate in Transportation Engineering

## Admission Requirements

Applicants must meet the basic requirements of the Graduate School. A bachelor's degree from an approved college or professional school, and academic records and credentials which indicate ability to pursue graduate work are essential. Professional experience will be considered where such experience suggests ability to pursue the work and to develop an understanding of new areas of knowledge.

## Departmental Requirements

There are two programs in Transportation Engineering: 1) Master's Degree Program and 2) Certificate Program.

## Requirements for Master's Degree in Transportation Engineering

1. Due to the interdisciplinary nature of the transportation field, applicants will have diversified backgrounds. Some applicants may be required to take 400 numbered courses to gain the prerequisite knowledge for certain of the core courses. These are not credited toward the 42 credit degree requirement.
2. Each candidate shall complete 42 credits of course work beyond the bachelor's degree which shall include EML $500,501,502,503,504,507,508,509$, $510,516,517,518,519$ or 520 and 9 elective credits of designated graduate courses in Mechanical Engineering, Business, or Public Administration.
Those students electing EML 519 Engineering Project, will need three electives for the degree. Those electing EML 520 Thesis, will need two electives for the degree.

## Requirements for Certificate Program in

Transportation Engineering

1. Each candidate for the certificate program shall take 18 credit hours at Seattle University from EML 500, EML 501, EML 502, EML 503, EML 504, EML 507, EML 508, EML 509, EML 510, and 9 elective credits from designated graduate courses in Mechanical Engineering, Business or Public Administration.
2. These courses may be credited toward the degree as long as an average grade of $B$ is maintained.
3. Certain courses may require prerequisite knowledge. This will be determined by the Program Director on an individual basis.
4. There shall be no transfer credit for the certificate.

## Typical Program

First Year
Fall Quarter
EML 500 Role of Transportation in Society... 3 credits EML 501 Principles of Transportation Analysis and
Planning I.

Winter Quarter
EML 503 Transportation System Economics and Management $\quad . . \ldots \ldots .3$ credits
EML 502 Principles of Transportation
Analysis and Planning II ..................... 3 credits
Spring Quarter
EML 504 Transportation and Vehicle
Control Systems ............................... 3 credits
Elective ........................................................ 3 credits

## Second Year

## Fall Quarter

EML 510 Energy Utilization, Emissions, and Noise I ........ 3 credits
EML 507 Vehicular Technology I ........ 3 credits
EML 516 Seminar and Lecture Series ........... 1 credit

## Winter Quarter

Elective .............................................. 3 credits
EML 508 Vehicular Technology II.............. 3 credits
EML 517 Seminar and Lecture Series .......... 1 credit
Spring Quarter
Elective ......................................... 3 credits
EML 509 Vehicular Technology III.............. 3 credits
EML 518 Seminar and Lecture Series.......... 1 credit
Summer Quarter
EML 519 Engineering Project .................. 3 credits or
EML 520 Thesis $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . \ldots$ credits

## Graduate Courses

## EML 500 Role of Transportation in Society

3 credits Overall consideration of transportation. Problems. Projecting trends. Interaction of legal, physical, and energy aspects. Land use and urban development.

EML501 Principles of Transportation Analysis and Planning I

## 3 credits

Analytical methods applied to vehicle technology, transportation networks. Analysis of operations. Trade-offs.

EML 502 Principles of Transportation Analysis and Planning II

3 credits
Continuation of EML 501. Systems planning. Models for demand estimation, network stability, and system evaluation using computers. Prerequisite: EML 501.

EML 503 Transportation System Economics and Management

3 credits
Short and long range economics. Engineering design on capital and operating costs. Revenue projections. Break-even. Modal price competition. Capital investment. Competitive designs.

EML 504 Transportation and Vehicle Control Systems

3 credits
Traffic control for air, ship, urban, and automobile transportation. Vehicle control, automated urban systems, computerized freight yards. Simulation techniques. Prerequisite: EML 502



EML 505 Maintainability and Reliability of Transportation Systems 3 credits Reliability of current systems. Fault-tree analysis. Inventory control of spare parts. Effect on design. Life cycle costing

EML 506 Transportation Safety 3 credits Safety analysis of current systems. Failure and faulttree analysis. Government guidelines and policies. Legal method applied to transportation issues.

EML 507 Vehicular Technology I
3 credits General principles-aerodynamics, stability, dy namics structural design. Propulsion systems and drive systems. Prerequisite: EML 502, EML 504.

EML 508 Vehicular Technology II
3 credits
Vehicle design-suspensions, modules, chassis, interiors, auxiliary power systems. Criteria for energy use in design. Ride quality design. Affect of guideway/roadway topology on vehicle design. (Mission Profile) Prerequisite: EML 507

EML 509 Vehicular Technology III
3 credits
Evaluation of transportation vehicle systems. State of the art systems: shuttle, offline stations, light rail, long haul. Government, industrial, and energy constraints. Advanced economic evaluation of advanced technology concepts. Prerequisite: EML 508.

EML 510 Energy Utilization, Emissions and Noise I

3 credits
Energy consumption. Vehicular and systems design constraints on conservation. Future energy sources, chemical emissions, atmospheric reactions, pollution, federal regulations.

EML 511 Energy Utilization, Emissions and Noise II 3 credits
Continuation of EML 510. Control of noise. Principles of noise generation, transmission, and measurement. Noise reduction. Federal regulations. Prerequisite: EML 510.

EML 513 Intermodal Transportation Systems Analysis

3 credits
Problems arising from the interaction of systems in modern society and technology. Modeling and simulation. Innovations in moving people and goods from one mode to another.

EML 514 Special Problems in Transportation 3 credits Special studies under the direction of a faculty member for which academic credit may be granted. By arrangement.

EML 515 Special Problems in Transportation 3 credits Continuation of EML 514.

EML 516 Seminar and Lecture Series 1 credit Presentation of current topics by guest speakers and students in the graduate program. Experience in writing, speaking and chairing meetings.

EML 517 Seminar and Lecture Series 1 credit Continuation of EML 516.

EML 518 Seminar and Lecture Series 1 credit Continuation of EML 517.

EML 519 Engineering Project 3 credits Preparation of a written engineering report on some facet of transportation. Oral presentation in seminar.

EML 520 Thesis

## 6 credits

Research in transportation engineering culminating in the writing of a thesis. Oral presentation in seminar. Prerequisite: Admission to candidacy for the degree Master of Transportation Engineering.


## Master of Software Engineering

## Objective

This program seeks to apply engineering techniques and procedures to computer software design and to software management. The program is intended primarily for practitioners who, besides holding an undergraduate degree, have had considerable software development experience. Course offerings are scheduled for the part-time, evening student. These courses are cycled over a two year period.

## Degree Offered

Master of Software Engineering

## Admission Requirements

A baccalaureate degree in engineering, science, business, or other relevant discipline, with prior experience in software development or management is required. Specific information can be secured from the Program Director.

## Requirements for Master's Degree in Software Engineering

Minimum requirements for the degree are 45 quarter credit hours at the graduate level. The basic program requires all students to take 18 quarter hours of core courses. Completion of these core courses allows the student to pursue one of two options, either Software Engineering Design or Software Engineering Management. A three quarter sequence in a laboratory experience totaling nine credit hours is required of all students. Foundation courses may be required before admission to the regular graduate courses.

## Typical Program

First Year: Two courses each quarter for three quarters to satisfy the core program-18 quarter credit hours.

Second Year: Two sequences of two courses each quarter, one sequence in Software Development, or in Software Management -18 quarter credit hours in each sequence or in a combination of the two sequences.

Third Year: One three quarter laboratory sequence devoted to the definition, design, development, documentation and implementation of a significant software system or systems-9 quarter credit hours.


Master's in Public Administration<br>James E. Sawyer, Ph.D., Director

## Objectives

The Institute of Public Service is an interdisciplinary graduate center. It offers two programs of study: a Master of Public Administration and a post-baccalaureate Certificate in Human Resources Development. All courses are designed to accommodate both working professionals and full-time students.
The Institute emphasizes agency and community involvement as well as traditional and non-traditional education. It has programs oriented to public policy formation and administration and seminars and workshops in issues of current public concern.

## Degree Offered

Master of Public Administration

## Admission Requirements

Applicants must meet the basic requirements of the Graduate School. A bachelor's degree from an approved college or professional school and academic records and credentials which indicate ability to pursue graduate work are essential. Professional experience will be considered where such experience suggests ability to pursue the particular programs at the Institute.

Maturity sufficient to work independently on the Problem Oriented Project is another criterion for admission. Motivation will also be considered inasmuch as the Institute is conceived as a developer of committed mature and able public servants, rather than a certifying institution or a program for the refinement of narrow vocational skills. Applicants should submit two letters of reference (one attesting to potential for graduate work) and a letter of intent (two pages) discussing career objectives and interest in the program. While grade point average will not be used as a fixed guide, it is considered; some students may be admitted on probation for two quarters (maximum of 12 credits) after which they must be approved for regular status.

## General Program Requirements

There are four elements to the program:

1. Core Courses: Pub 501, 505, 515, 520, 525, 550 and 571. Electives may be substituted whenever a student has the equivalent in experience or graduate work at another school.
2. An area of concentration requiring at least 9 credits. Public Management Criminal Justice Systems Public Planning Human Resources Management
A typical program will consist of 21 credits of core courses, 9 credits in an area of concentration, 6 credits of Problem Oriented Project, and 9 credits of electives to complete the required 45 credits.
3. Electives: All courses other than core courses are electives.
4. Problem Oriented Project, Pub 588.

## Certificate in Human Resources Development

The certificate in Human Resources Development provides basic analytical skills for active and aspiring professionals in public personnel management, labor relations, and employment ("manpower") policy. There are three areas of concentration:

- Labor Relations
- Public Personnel Development
- Employment Policy and Management

To fulfill the requirements of the certificate, a student must complete 22 credits, including the introductory course, PUB 440.
Those who complete the certificate program with a minimum of a $B$ average and who otherwise meet the requirements for graduate admission, may apply the certificate program credits toward the Master of Public Administration degree.

## Admission Requirement

A bachelor's degree from an accredited college, university or professional school is required. The total record must indicate an ability to pursue graduate studies. Two letters of reference.

## Public Service Courses

## Pub 400 Professional Skills Laboratory 5 credits

 Emphasis on critical thinking, policy analysis and evaluation, library research tools, concept formation. Required of fifth year students seeking admission to the graduate program.Pub 416 Policy Analysis and Public Planning 5 credits Survey of the elements of analyzing public policy including positive, normative, and quantitative models.

## Pub 430 Public Interest

5 credits

Pub 440 The Work Ethic in Modern Perspective 5 credits Interdisciplinary approach to the relationship of the work ethic to search for meaningful self-expression and societal contribution.

Pub 460 Introduction to Economics
2 credits Basic economic concepts and techniques of analysis. Organization, operation and control of the American economy. Preparation for Pub 571-Government Finance.

Pub 470 Readings in Public Service
2-5 credits
Selected readings in intergovernmental relations, recent political theory, constitutional law and public administration and policy development.

| Pub 491 | Special Topics | $1-5$ credits |
| :--- | :--- | :--- |
| Pub 492 | Special Topics | $1-5$ credits |
| Pub 493 | Special Topics | $1-5$ credits |
| Pub 496 | Independent Study | $1-4$ credits |
| Pub 497 | Independent Study | $1-4$ credits |
| Pub 498 | Independent Study | $1-4$ credits |

## Pub 501 Applied Quantitative Analysis

3 credits Basic concepts of descriptive and inferential statistics with emphasis on public sector applications. Graphical and numerical techniques for describing data, estimation, hypothesis testing, regression and correlation.

Pub 505 Legal Environment
3 credits
Objectives of American legal system, structure, procedures, courts and regulatory commissions. Relationship of law to social change and society's value. Contract, anti-trust and manufacturer's liability law.

Pub 515 Bureaucracy and the Policy Process 3 credits Influence of American public bureaucracies upon public policy. Topics include bureaucratic theory, program implementation, control processes, and policy system elements.

Pub 520 State and Local Government Systems 3 credits Interdisciplinary approach to the nature and relationships of local government systems. Constitutional and legal powers, limitations, special problems in urban economics, issues of urban/suburban politics.

Pub 525 Human Perspectives in Public Service 1 credit Seminars which focus upon individual direction and motivation, and current political and organizational issues, in an era of change in public administration.


Pub 535 Program Evaluation 3 credits Methods for evaluating local and national public programs. Program objectives, activities and resources, preparation of research design; development of measurement and data collection instruments; and interpretation of findings.

Pub 542 Public Personnel Management 3 credits Historic, present and future role of personnel functions. Development of civil service, job classification, motivation, performance evaluation, current issues, training, and disciplinary procedures.

Pub 545 Comparative Public Service
3 credits Analysis of criminal justice, welfare, human resource (elderly, juveniles, family) planning and administrative systems of other nations.

Pub 550 Planning Process
3 credits
An overview of planning as a process, a profession and a governmental activity. Planning techniques for analyzing problems, developing alternative solutions, and implementing plans.

Pub 552 Human Services Planning
3 credits User-or-client-oriented approach to planning services and programs within the context of national social policy issues. Techniques for needs assessment, program design and service delivery. Prerequisite: Pub 550.


Pub 553 Housing Policy and Planning 3 credits
Analysis of the housing market. History, analysis and effects of government intervention. How local agencies plan for housing needs.

Pub 555 Employment Policy and Economics 3 credits Analysis of the labor market. Evolution of employment policy, economics and social goals. Analysis of federal legislation, man-power agencies. Problems of minority groups and the non-affluent.

Pub 556 Employment Policy Planning 3 credits Issues and techniques central to the current professional practice of employment planning in the United States. Examines current national employment policies and assesses employment stimulation alternatives.

Pub $557 \begin{aligned} & \text { Health Systems, Planning and } \\ & \text { Service Delivery }\end{aligned} \quad 3$ credits
3 credits tem, patients, services and facilities. Emphasis on health manpower, public health and long term care.

Pub 559 Environmental Regulation and Land Use Planning

3 credits
Survey of approaches to environmental control. Environmental impact analysis, shoreline management, strip mining legislation. Land use planning and control systems impact on business, labor, environment and quality of life.

Pub 560 Criminal Justice Theory and Systems 3 credits Major components of the criminal justice agencies viewed as an interdependent system. Required of students who select Criminal Justice area of concentration.

Pub 565 Criminal Justice Planning
3 credits
Alternative strategies to meet public safety priorities in juvenile delinquency and corrections.

Pub 571 Government Finance 3 credits
Revenues, expenditures and debts of federal, state and local governments; economic theories; constitutional limitations; government finance as means for social reform.

Pub 580 Administrative Behavior in Public Organization 3 credits
Survey in management theory. Scientific management, human relations, Theory X and Theory Y , contingency concepts. Organizational leadership and decision-making; organization design, small group influences upon behavior.

Pub 581 Labor Law and Collective Bargaining 3 credits History of organized labor. Practical review of how the national labor relations board functions, collective bargaining, mediation and arbitration, strikes and secondary boycott, public service collective bargaining; equal employment laws.

Pub 582 Organization Communication
3 credits
Communication processes in organizations: dyadic, intragroup, intergroup. Communication models, semantics, accuracy, nonverbal behavior, networks.

Pub 585 Management of Change
3 credits
A course on the future: forecasting methods, trends, scenarios. Discussions of change processes (diffusion, revolution, attitude change) and methods of responding.

Pub 587 Decision-Making Process
Applied comprehensive policy analysis. Focus on structuring frameworks for rational decision-making in a political, value-laden world. Problem definition objective setting and creative development of alternatives emphasized. Prerequisites: Pub 501 and 515 or permission.

Pub 588 Problem Oriented Project
3-15 credits
Research and design in a special sphere of interest. Functional equivalent of the masters' thesis.

Pub 591 Special Topics
Pub 592 Special Topics
1-5 credits
1-5 credits 1-5 credits

Pub 595 Internships
1-3 credits

Pub 596 Independent Study
Pub 597 Independent Study
Pub 598 Independent Study

## 1-5 credits

 1-5 credits 1-5 credits
## University Administration

William J. Sullivan, S.J., Ph.D., President
William A. Guppy, Ph.D., Academic Vice President
Gregory F. Lucey, S.J., Ph.D., Vice President for Educational Planning and Development
James P. Lyddy, Ph.D., Vice President for University Relations
Kenneth R. Nielsen, Ed.D., Vice President for Student Life
Virginia L. Parks, Ph.D., Vice President for Business and Finance
William Hayes, S.J., M.A., Executive Assistant to the President
Timothy F. Cronin, S.J., M.Ed., Administrative Assistant to the Academic Vice President
George A. Pierce, Ph.D., Director of Planning

## Graduate Faculty

Josef C. Afanador, Ed.D., Assistant Professor of Rehabilitation
Richard H. Ahler, S.J., S.T.D., Associate Professor of Theology and Religious Studies
Julian B. Andersen, Ph.D., Associate Professor of Business
Robert E. Callahan, Ph.D., Assistant Professor of Business
Frank E. Case, S.J., M.A., Assistant Professor of Business
Gerald L. Cleveland, Ph.D., Professor of Business
Bonnie Jean Denoon, Ph.D., Assistant Professor of Education
Khalil (Charles) Dibee, Ph.D., Professor of Finance
Robert J. Egan, S.J., Ph.D., Assistant Professor of Theology and Religious Studies
John D. Eshelman, Ph.D., Associate Professor of Economics
C. Patrick Fleenor, Ph.D., Associate Professor of Business

Frederick J. Gies, Ed.D., Professor of Education
Margaret M. Haggerty, Ph.D., Associate Professor of Education

Gerald Hampton, Ph.D., Assistant Professor of Marketing
John M. Harding, J.D., Assistant Professor of Business
Hildegard R. Hendrickson, Ph.D., Professor of Economics and Finance
David R. Knowles, Ph.D., Assistant Professor of Economics
Robert E. Lowery, Ed.D., Associate Professor of Education

Harry Majors, Jr., M.S., Professor Emeritus
Badiul A. Majumdar, Ph.D., Assistant Professor of Business
Leonard B. Mandelbaum, Ph.D., Associate Professor of Business

Derek M. Mills, M.P.A., Instructor in Public Administration
John A. Morford, Ed.D., Professor of Education
R. Michael O'Connor, Ph.D., Assistant Professor of Education
Virginia L. Parks, Ph.D., Professor of Accounting and Economics
Ronald A. Peterson, J.D., Associate Professor of Business and Law
Ekkehard J. Petring, Ph.D., Associate Professor of Rehabilitation
Mary C. Pirrung, M.A., Professor of Education
James E. Sawyer, Ph.D., Assistant Professor of Public Administration
Leo P. Stanford, Ph.D., Associate Professor of Theology and Religious Studies
Harriet B. Stephenson, Ph.D., Professor of Management
David E. Tinius, Ph.D., CPA, Associate Professor of Accounting
Roy P. Wahle, Ed.D., Associate Professor of Education
William L. Weis, M.B.A., Assistant Professor of Business

John R. Wilby, M.S., Lecturer in Business
Marylou Wyse, Ph.D., Professor of Education
Charles A. Yackulic, M.A., Associate Professor of Education
Barbara M. Yates, Ph.D., Associate Professor of Economics

Richard E. Zackrison, Ph.D., Assistant Professor of Business
Gary H. Zarter, Ph.D., Associate Professor of Education



[^0]:    Those wishing a specialization in career-vocationa counseling should also include the following in their programs:

    Psychology of Careers (Ed 516)
    Philosophy of Vocational Education
    Organization and Administration of Vocational Education
    Occupational Analysis (Ed 576)
    Seminar in On the Job Training (Ed 567)

[^1]:    5. Ed 530*-Practicum in Curriculum Design
    6. Ed 536 -Supervision of Instruction
    7. Ed 537*-Curriculum Independent Study
    8. Ed 541.-Curriculum Seminar
    9. Ed 539*-Curriculum Graduate Project

    * Study and research in these courses can be oriented toward Physical Education.

