DEN@Viterbi
MORK FAMILY DEPARTMENT ORIENTATION

Academic Info

Andy S. Chen, Director, MFD Student Affairs

Idania Takimoto, Student Services Advisor
AGENDA

- Welcome to DEN@Viterbi & USC
- Important Dates & Deadlines
- Degree Requirements
- Mork Family Dept. Policies, Procedures, Tips
- Advisement: DEN D-clearance
- DEN Contact Information
- Getting connected
- Q & A
Welcome to DEN@Viterbi and USC

CHE & MASC/MTE MS Students and all PhD Students

Andy Chen, Director, MFD Student Affairs

Phone  213-740-6011
Email   andysche@usc.edu

PTE MS Students

Idania Takimoto, PTE Student  Services Advisor

Phone  213-740-0322
Email   takimoto@usc.edu
Faculty Advisors

Chemical Engineering
Dr. Katherine Shing
Email shing@usc.edu

Materials Science
Dr. Ed Goo
Email ekgoo@usc.edu

Petroleum Engineering
Dr. Iraj Ershaghi
Email ershaghi@usc.edu
UNIVERSITY CALENDAR – spring 2018

Oct 23- Jan 5  Registration for spring semester continues

Jan 5  Last day to register and settle without late fee

Jan 8  Spring semester classes begin

Jan 15  MLK Day, university holiday

Jan 26  Last day to drop a class without a mark of “W,” except for Monday-only classes, and receive a refund

Jan 26  Last day to change enrollment option to Pass/No Pass or Audit
UNIVERSITY CALENDAR – spring 2018 cont.

Feb 19    Presidents’ Day, university holiday

Feb 23    Last day to drop a course without a mark of “W” on the transcript
           *Please drop any course by the end of week three for session 001 (or the 20 percent mark of the session in which the course is offered) to avoid tuition charges.

Mar 11-18 Spring Recess

April 6    Last day to drop a class with a mark of “W”

April 27   Spring Semester Classes End

Apr 28-May1 Study days

May 2-9    Final examinations

May 10    Spring semester ends
PROGRAM REVIEW

• Master of Science in Chemical Engineering
• Master of Science in Materials Engineering
• Master of Science in Materials Science (Not Available on DEN)
• Master of Science in Petroleum Engineering
• Master of Science in Petroleum Engineering Smart Oilfield Technologies
• Master of Science in Petroleum Engineering Geoscience Technologies
• Master of Science in Petroleum Engineering/Engineering Management
Master of Science in Chemical Engineering

Requirements for Graduation 28 units total with 3.0 GPA overall (deficiency courses may be required for students without a CHE background):

Seminar Requirement:

1 unit of ChE 550ab or ChE 590 (for DEN students).

The nine courses are divided into 3 Groups:

Group I: Required Core:

12-units total
4 required core courses, all students must take:
ChE 501 Modeling and Analysis of Chemical Engineering Systems (Fall Semester)
ChE 530 Thermodynamics for Chemical Engineers (Fall Semester)
ChE 540 Viscous Flow (Fall Semester)
ChE 542 Chemical Engineering Kinetics (Spring Semester)

Group II: Elective Core:

6-units
Choose 2 courses from:
ChE 541 Mass Transfer (Spring Semester)
ChE 544 Heat Transfer (Spring Semester)
ChE 599 Process Data Analytics and Machine Learning (Spring Semester)
ChE 502 Numerical Methods for Diffusive and Convective Transport*
ChE 560 Advanced Separation and Bioseperation Processes*
ChE 554 Principles of Tissue Engineering*
Master of Science in Chemical Engineering (cont.)

Group III: Electives

9-units
Choose from:
ChE 510 Energy and Process Efficiency
ChE/AME 513 Principles and Process Efficiency
ChE/MASC 523 Principles of Electrochemical Engineering*
ChE/PTE 531 Enhanced Oil recovery
ChE 532 Vapor-Liquid Equilibria*
ChE 572 Advanced Topics in Polymer Kinetics & Rheology*
ChE/PTE 582 Fluid Flow and Transport Processes in Porous Media
ChE 590 (Directed Research, 1 - 3 units, approval of research advisor required before registering)

Please note that Graduate Students Cannot Count More than 9 units of 400 Level Courses towards Their MS Degree

ChE 450 Sustainable Energy
ChE 472 Polymer Science & Engineering
ChE 474L Polymer Science Engineering Laboratory*
ChE 475 Physical Properties of Polymers
ChE 477 Computer Assisted Polymer Engineering and Manufacturing I*
ChE 486 Design of Environmentally Benign Process Design*
ChE 487 Nanotechnology and Nanoscale Engineering through Chemical Processes
ChE 489 Biochemical Engineering
ChE 499 Chemical Process Safety
Approved 400-level or above courses in Math, Science & Engineering.

Note: Courses marked with * are not offered on regular schedule.
Master of Science in Materials Engineering

*Requirements for Graduation* 27 units total with 3.0 GPA overall:

**Core Courses: 18 units**
A minimum of 18 units must be graduate courses in Materials Science.

**Electives:**
The remaining 9 units may be graduate courses outside of Materials Science with departmental approval.

[https://chems.usc.edu/academics/graduate-programs/materials-science/](https://chems.usc.edu/academics/graduate-programs/materials-science/)
Master of Science in Petroleum

Requirements for Graduation 27 units total for Petroleum Engineering with 3.0 GPA overall (15 additional units min. of deficiency courses are required for students without a B.S. in Petroleum Engineering):

Core Courses: 18 units
PTE 507 Engineering and Economic Evaluation of Subsurface Reservoirs
PTE 508 Numerical Simulation of Subsurface Flow and Transport Processes
PTE 517 Testing of Wells and Aquifers
PTE 531 Enhanced Oil Recovery
PTE 555 Well Completion, Stimulation, and Damage Control
PTE 582 Fluid Flow and Transport Processes in Porous Media

Electives (9 units for MS PTE):
502, 503, 504, 505, 506, 511, 512, 514, 515, 519, 542, 545, 572, 574, 578, 581, 586, 587, 588, 589 and 590

Deficiency Courses (required for Non-BS PTE students)
411, 412, 461, 466, 500

http://catalogue.usc.edu/content.php?catoid=7&navoid=1730
Master of Science in Petroleum Engineering (Smart Oilfield Technologies)

Requirements for Graduation 34 units total with 3.0 GPA overall (15 additional units min. of deficiency courses are required for students without a B.S. in Petroleum Engineering):

Core Courses: 30 units
PTE 507 Engineering and Economic Evaluation of Subsurface Reservoirs
PTE 508 Numerical Simulation of Subsurface Flow and Transport Processes
PTE 517 Testing of Wells and Aquifers
PTE 531 Enhanced Oil Recovery
PTE 555 Well Completion, Stimulation, and Damage Control
PTE 582 Fluid Flow and Transport Processes in Porous Media
PTE 586 Intelligent and Collaborative Oilfield Systems Characterization and Management
PTE 587 Smart Completions, Oilfield Sensors and Sensor Technology
PTE 588 Smart Oilfield Data Mining
PTE 589 Advanced Oilfield Operations with Remote Immersive Visualization and Control

Electives (4 units):
PTE 500, 502, 503, 504, 505, 506, 511, 512, 514, 515, 519, 542, 545, 572, 574, 578, 581, 590

Deficiency Courses (required for Non-BS PTE students)
411, 412, 461, 466, 500
Master of Science in Petroleum Engineering (Geoscience Technologies)

Requirements for Graduation 34 units total with 3.0 GPA overall (15 additional units min. of deficiency courses are required for students without a B.S. in Petroleum Engineering):

Core Courses: 30 units
- PTE 502 Advanced Reservoir Characterization
- PTE 503 Technology of Unconventional Oil and Gas Resources Development
- PTE 504 Geophysics for Petroleum Engineers
- PTE 505 Inverse Modeling for Dynamics Data Integration
- PTE 507 Engineering and Economic Evaluation of Subsurface Reservoirs
- PTE 508 Numerical Simulation of Subsurface Flow and Transport Processes
- PTE 517 Testing of Wells and Aquifers
- PTE 531 Enhanced Oil Recovery
- PTE 555 Well Completion, Stimulation, and Damage Control
- PTE 582 Fluid Flow and Transport Processes in Porous Media

Electives (4 units):
- 4 units of an elective course i.e. PTE 572 (Engineering Geostatistics)

Deficiency Courses (required for Non-BS PTE students)
- 411, 412, 461, 466, 500
Master of Science in Petroleum Engineering/Engineering Management

Requirements for Graduation 45 units total with 3.0 GPA overall (15 additional units min. of deficiency courses are required for students without a B.S. in Petroleum Engineering):

Core Courses: 36 units
ISE 500 Engineering Management Decisions and Statistics
ISE 514 Advanced Production Planning and Scheduling
ISE 515 Engineering Project Management
ISE 544 Management of Engineering Teams
ISE 561 Economic Analysis of Engineering Projects
1 Pre-approved Business Management Course (3 units)
PTE 507 Engineering and Economic Evaluation of Subsurface Reservoirs
PTE 508 Numerical Simulation of Subsurface Flow and Transport Processes
PTE 517 Testing of Wells and Aquifers
PTE 531 Enhanced Oil Recovery
PTE 555 Well Completion, Stimulation, and Damage Control
PTE 582 Fluid Flow and Transport Processes in Porous Media

Electives (9 units):
9 units of PTE elective courses

Deficiency Courses (required for Non-BS PTE students)
411, 412, 461, 466, 500
Mork Family Department Dept. Policies, Procedures, Tips

- Transfer Credit – possible to transfer in up to 4 units if not applied to previous degree
- Changing Majors
- All coursework must be from Viterbi School of Engineering
- Electives must be approved by faculty advisors. Please make sure to check in with your faculty advisor prior to enrolling into courses
- Refer to the USC Schedule of Classes for planning purposes [http://classes.usc.edu/](http://classes.usc.edu/)
- Check your USC email regularly! Forward to Gmail account
HOW TO REQUEST D-CLEARANCE FROM DEN

All DEN courses require D-clearance.

1. Login to DEN Desire2Learn: [http://courses.uscden.net](http://courses.uscden.net)
2. Go to DEN@Viterbi Tools on the navigation bar
3. Select “Request D-clearance” link, select the term, and select a course
4. Approval process takes 1 business day. To view the status of a request, click on “Check D-Clearance Status”
5. You can register once your request has been processed. D-clearances expire 7 days from when it is issued so register as soon as you obtain it to secure a seat in a course.

For questions on D-Clearance status, contact masters@gapp.usc.edu
1. Bookmark [https://courses.uscden.net](https://courses.uscden.net)
2. Your D2L username is your full USC Email Address
3. If you do not remember your D2L password, click “Forgot your password?”

Sign up for an exclusive one-on-one training session inside a virtual classroom to learn all about Desire2Learn:

[https://viterbigrad.usc.edu/technical-support/training-options/](https://viterbigrad.usc.edu/technical-support/training-options/)
# DEN@Viterbi Contacts

<table>
<thead>
<tr>
<th>DEN@Viterbi Support</th>
<th>Contact Information</th>
<th>Staff</th>
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<tbody>
<tr>
<td>Technical support,</td>
<td><a href="mailto:dentsc@usc.edu">dentsc@usc.edu</a></td>
<td>Rebecca Lee</td>
</tr>
<tr>
<td>Desire2Learn training,</td>
<td>213-740-9356</td>
<td>Bianca Richter</td>
</tr>
<tr>
<td>Homework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exams</td>
<td><a href="mailto:denexam@usc.edu">denexam@usc.edu</a></td>
<td>Shirley Schutt</td>
</tr>
<tr>
<td>213-740-9356</td>
<td></td>
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<tr>
<td>GAPP Advisor for</td>
<td><a href="mailto:ptrinida@usc.edu">ptrinida@usc.edu</a></td>
<td>Patty Rinehart</td>
</tr>
<tr>
<td>registration, d-clearance,</td>
<td>213-740-0116</td>
<td></td>
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<tr>
<td>policies and procedures</td>
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<td></td>
</tr>
<tr>
<td>Tuition Deferment or</td>
<td><a href="mailto:susannas@usc.edu">susannas@usc.edu</a></td>
<td>Susanna Sahakian</td>
</tr>
<tr>
<td>Vouchers</td>
<td>213-740-8198</td>
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Get Connected

- Student groups- SPE, AIChE, MFD MSA, VGSA
  - Professional Conferences
  - Network Sessions
  - Study Groups
  - Career fairs
  - Faculty panels
  - Alumni Panels
  - Social Events
- Stop by campus
- Check in with your advisors
- Research
THANK YOU!

HAVE A GREAT SPRING SEMESTER!
FIGHT ON!

A recording of this online orientation and presentation will be available for viewing and download on the GAPP website at
https://viterbigrad.usc.edu/academic-services/new-student-information/