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#### **Advisor Responsibilities**

- My goal is to make sure you understand all you need to know about your degree requirements at Valencia College.
- I will provide a safe space for you to discuss your concerns and I will listen, be present, respectful, and genuine.
- Our resources are endless! I will always point you in the right direction if you connect with me.
- I will help you with your questions about colleges and universities you are thinking about transferring to and what it takes to get there.
- Helping you find a major and a career that is right for you is my goal. I will provide you with information and support you along the way.
- This is your journey, but you are not alone! I will help you select your courses, understand your prerequisites, create your plans and set goals.

### **Student Responsibilities**

- I will connect with my advisor every semester.
- When I schedule an appointment, I will start thinking about what I want to talk about.
- I will bring my "note-taking tools" with me to my appointments (e.g., phones, tablets, or good old paper and pen).
- We will be going over important information, so I will keep all of it handy and refer to it often.
- If my advisor refers me to any resources, I will be sure to follow through and I will stay in touch.
- I will take responsibility, know the deadlines, ask questions, stay on track and be the one to know what to do.



# Who is My Advisor?

Students O - 12 credit hours can seek advising from their new student experience professor, visit the <u>Advising Center</u>, virtually or in person for assistance.

Students who have completed 12+ credit hours can find their advisor through their Atlas account!

Follow the steps below:

- Log on to your Atlas account
- Click on "Courses" on the left-hand side
- Look under the "Academic Profile" Box
- Find your Advisor's name under the "Advisor's" section



### Types of Engineering Bachelor Degrees

Below is a list of Florida public universities and degree programs offered in the area of engineering. Visit <u>FloridaShines</u> to explore all Florida public and private institutions.

Advanced Manufacturing Engineering (UNF)

Aerospace Engineering (UCF, UF)

Bioengineering (FGCU)

Biological Engineering (UF)

Biomedical Engineering (FAMU, FGCU, FIU, FSU, UF, USF)

Chemical Engineering (FAMU, FSU, UF, USF)

Civil Engineering (FAMU, FAU, FGCU, FIU, FSU, UCF, UF, UNF, USF)

Coastal & Oceanographic Engineering (UF)

Computer Engineering (FAMU, FAU, FIU, FSU, UCF, UF, USF, UWF)

Construction Engineering (UCF)

Electrical Engineering (FAMU, FAU, FIU, FSU, UCF, UF, UNF, USF, UWF)

Environmental/Health Engineering (FAMU, FAU, FGCU, FIU, USF, UCF, UF)

Geomatics Engineering (FAU)

Industrial/Manufacturing Engineering (FAMU, FSU, UCF, USF)

Industrial & Systems Engineering (UF)

Interdisciplinary Engineering (FIU)

Materials Science and Engineering (UF, UCF)

Mechanical Engineering (FAMU, FAU, FIU, FSU, UCF, UF, UNF, USF, UWF)

Nuclear Engineering (UF)

Ocean Engineering (FAU)

Photonics Science and Engineering (UCF)

Software Engineering (FGCU)

## Other Valencia College Programs of Interest

# **Electrical and Computer Engineering Technology Bachelor** of Science

The <u>Electrical and Computer Engineering Technology Bachelor of Science</u> (B.S.) degree at Valencia College will prepare you for an advanced career in electrical engineering or computer engineering.

Requirements for this degree may differ from other engineering bachelor degrees. Speak with an advisor for more information about course requirements.

The Electrical and Computer Engineering Technology Bachelor's degree offers graduates of an A.A. Degree Pathway in Engineering, an A.S. degree in Electronics Engineering Technology, or an articulated specialization in Audio Engineering Technology within the Sound and Music A.S. degree the opportunity to expand their knowledge in advanced modalities and administration. With professional experience and additional education at the baccalaureate level, you can enhance your opportunities for management and expand your career options.

#### AS Stem, Engineering Specialization

The Associate in Science (A.S.) degree in Science, Technology, Engineering and Math (A.S. STEM) at Valencia College is a two-year program that prepares students to successfully transfer to a baccalaureate program. Students will complete the required 36 hours of general education credits for the bachelor's degree along with the elective courses geared towards a specific major.

This specialization academically prepares students by providing the Engineering, Physics and Mathematics foundation courses required to success in a baccalaureate engineering program. Upon graduating from this specialization, Valencia students are eligible to enter an engineering bachelor's degree in their preferred University of Central Florida engineering program, with junior standing, and seek a career in industry. Other universities may have additional requirements, so it is important to consult with both your transfer institution's catalog and a Valencia advisor.



#### Careers in Engineering

To learn more about the engineering field and career outlook, click on the links below.

<u>Valencia's Career Center</u> provides resources to help you explore major and career options that are right for you.

<u>Dr. Kit</u> is a resource you can use to watch career videos with people who work in different careers. You can learn what it is like to be an engineer, including a typical day, qualifications, and best and worst parts of the job.

**STEM Rising**, at the U.S. Department of Energy, shares resources and events from the National Labs, National Nuclear Security Administration, and program offices.

**NACME Engineering Careers** (National Action Council for Minorities in Engineering) is a site where you can explore different types of engineering careers.

Below are some job search sites to help you gain insight into experience, skills, and qualifications that employers in the engineering field are seeking. Examples of some local employers include Lockheed Martin, Siemens, Nassal Companies, NASA, and Randall Construction.

<u>Indeed</u> is a job search tool you can use to search for engineering jobs, salary information, and job market trends.

<u>STEM Jobs</u> is a resource to search for science, technology, engineering and math jobs.

<u>LinkedIn</u> is a social network for job seekers, professionals, and businesses and helps you build your professional community.



#### Math and Science Course Sequences

To provide you with an overview of all of the math and science courses required in the engineering pathway, see the lists below.

#### **Math Course Sequences for Engineering Majors**

MAT 1033C Intermediate Algebra

MAC 1105 College Algebra

MAC 1140 Pre-calculus Algebra

MAC 1114 Trigonometry

MAC 2311 Calculus with Analytical Geometry I

MAC 2312 Calculus with Analytical Geometry II

MAC 2313 Calculus with Analytical Geometry III

MAP 2302 Differential Equations

Note: additional placement testing is available for students to begin in a higher-level math course.

Consider utilizing Math Help 24/7, which provides online videos from math professors. Use this resource to successfully complete your math requirements.

#### **Science Course Sequences for Engineering Majors**

CHM 1025C Introduction to General Chemistry

CHM 1045C General Chemistry with Qualitative Analysis I

PHY 2048C General Physics with Calculus I

PHY 2049C General Physics with Calculus II

Note: there may be an option to begin in CHM 1045C general chemistry, contact an advisor.

# **Engineering Degree Pathways**

The <u>Engineering Degree Pathways</u> provide an ideal educational/term-by-term plan for the AA degree. To view engineering courses offered at Valencia, see the "Electives and Pathway-Specific Information" section on the first page.



# **Your Checklist**

#### **0-12 Credit Hour Checklist**

$\infty$ This symbol represents actions that you should take at every credit hour benchmark.
□ Check your <u>Atlas</u> email daily. ∞
$\square$ Check if your meta-major matches your career of interest and change it if necessary. $\infty$
☐ Learn about the resources available to you, such as the Learning Support Center, Tutoring, Counseling, Career Advising and Atlas. For more information and locations, go to the <b>Student Services page</b> on the Valencia College website.
□ Consider utilizing Math Help 24/7, which provides online videos from math professors. Use this resource to successfully complete your math requirements. ∞
☐ Explore and research your career interests by visiting the <u>Career Center website</u> or connecting with a career advisor.
$\square$ Research colleges and universities of interest and the admission requirements.
$\square$ Run your <u>degree audit</u> and use your <u>catalog</u> to help you choose the right classes each term. For assistance, connect with an academic <u>advisor</u> . $\infty$
☐ Register for <u>SLS 1122 New Student Experience course</u> within your first two terms at Valencia College.
☐ Register for a STEM algebra math pathway course each semester. Additional <b>placement testing</b> is available for students to begin in a higher-level math course.
placement testing is available for students to begin in a higher-level math course.  □ Check Important Dates & Deadlines by visiting the
placement testing is available for students to begin in a higher-level math course.  ☐ Check Important Dates & Deadlines by visiting the Academic Calendar on the Valencia College website  ☐ Apply for scholarships by visiting the

#### 12-30 Credit Hour Checklist

$\infty$	This symbol represents actions that you should take at every credit hour benchmark.
	Check your <u>Atlas</u> email daily. ∞
	Confirm that your Meta-Major matches your career of interest and change it if necessary. $\mathbin{\infty}$
	Explore your major and career interests by considering volunteering, employment, <b>internships</b> , job shadowing and service learning.
	Decide on a major and your transfer university of interest. If you are still undecided, meet with an career or academic <u>advisor</u> .
	Run your <u>degree audit</u> and use your <u>catalog</u> to help you choose the right classes. For assistance, <u>connect with your advisor.</u> $\infty$
	Consider registering for EGS 1006C Introduction to the Engineering Profession for a better understanding of the engineering field.
	Register for a STEM algebra math pathway course each semester $\infty$
	Consider utilizing Math Help 24/7, which provides online videos from math professors. Use this resource to successfully complete your math requirements. $\infty$
	Check Important Dates & Deadlines by visiting the <u>Academic Calendar</u> on the Valencia College website. ∞
	Apply for scholarships by visiting the <b>Financial Aid Services</b> website. ∞
	<b>Get involved</b> on campus by joining student clubs and organizations, attending <b>campus events</b> and participating in health and wellness activities. $\infty$
	Keep your résumé current by reviewing it every semester and consider scheduling a mock interview. For assistance, visit the <b>Career Center website</b> or connect with a career advisor.

#### **30-45 Credit Hour Checklist**

$\infty$ This symbol represents actions that you should take at every	very credit hour benchmark.
☐ Check your <u>Atlas</u> email daily. ∞	
☐ Confirm that your Meta-Major matches your career it if necessary. ∞	of interest and change
☐ Decide on your educational goals by the time you c	omplete 45 credit hours.
☐ Research colleges and universities of interest, include requirements, application deadlines, housing option and connect with the academic departments.	_
☐ Consider exploring graduate school (e.g., master's canadvanced training, certifications and licenses.	degree, medical or law school),
□ Run your <u>degree audit</u> to confirm you are on track to connect with your advisor. ∞	for graduation. For assistance,
☐ Register for a STEM algebra math pathway course e	each semester. ∞
☐ Consider utilizing Math Help 24/7, which provides of professors. Use this resource to successfully complete.	
☐ Check Important Dates & Deadlines by visiting the Valencia College website. ∞	Academic Calendar on the
☐ Apply for scholarships by visiting the <b>Financial Aid</b>	<b>Services</b> website. ∞
☐ Get involved on campus by joining student clubs ar campus events and participating in health and wellr	
☐ Enhance your work experience and skills by volunte <a href="internships">internships</a> , service learning and job shadowing.	eering, employment,
☐ Keep your résumé current by reviewing it every sen a mock interview. For assistance, visit the <b>Career Ce</b> or connect with a career advisor.	_

#### **45-60 Credit Hour Checklist**

∞ This symbol represents actions that you should take at every credit hour benchmark.	
□ Check your <u><b>Atlas</b></u> email daily. ∞	
□ Confirm that your Meta-Major matches your career of interest and change it if necessary. ∞	
□ Register for a STEM algebra math pathway course each semester. ∞	
$\square$ Consider utilizing Math Help 24/7, which provides online videos from math professors. Use this resource to successfully complete your math requirements. $_{\infty}$	
□ Run your <u>degree audit</u> to confirm you are on track for graduation. For assistance, <u>connect with your advisor</u> . ∞	
☐ If you are ready, submit your <b>graduation application</b> by the deadline.	
☐ Explore housing options, develop a financial plan, schedule campus tours and connect with the academic departments.	
☐ Submit your admissions applications early to your colleges/universities of interest (and any other materials, such as transcripts and recommendation letters, if required).	
□ Check Important Dates & Deadlines by visiting the <u>Academic Calendar</u> on the Valencia College website. ∞	
☐ Apply for scholarships by visiting the <b>Financial Aid Services</b> web	
☐ Get involved on campus by joining student clubs and organizations, attending campus events and participating in health and wellness activities. ∞	
☐ Enhance your work experience and skills by volunteering, part-time employment, internships, service learning and job shadowing.	A
□ Keep your résumé current by reviewing it every semester and consider scheduling a mock interview. For assistance, visit the Career Center website or connect with a career advisor.	

# Engineering Resources Other Engineering & STEM Resources

Valencia Department Information
Engineering, Computer Programming and Technology

Engineering (Professional Licensing) Exams to Consider Florida Board of Professional Engineers

National Council of Examiners for Engineering (NCEES)

Engineering and STEM clubs at Valencia
Florida Engineering Society (FES) [West Campus]
FES Valencia College Facebook Group

<u>Institute of Electrical and Electronics Engineers (IEEE) [West Campus]</u>

**Math Club [East Campus]** 

National Society of Black Engineers (NSBE) [West Campus]

Society of Women Engineers (SWE) [West Campus]

STEM Club (Osceola)

STEM Club (West)

**WiSTEM (East Campus)** 

#### Other Engineering and STEM Resources

**Louis Stokes Alliance for Minority Participation (LSAMP)** 

Pathways to Science

Valencia College Undergraduate Research

NASA Community College Aerospace Scholars (NCAS)

**Florida Engineering Society** 



### Valencia College Resources

#### Need more information? Check these out!



**Internship and Workforce Services** 

Find an internship and be ready for the job



**Engage in about over 150 clubs and organizations** 



Learn more about over 150 clubs and organizations

#### VALENCIACOLLEGE

**Learning Support** 

**Get help with your studies** 



Build academic and emotional fitness

#### VALENCIACOLLEGE

**Veterans Affairs** 

Essential resources and support for veterans



Free fitness and recreational sports



Get help with behavioral health and more by calling **800-878-5470**Student Support Resources

#### VALENCIACOLLEGE

**Career Center** 

**Explore careers and**prepare for what's next

#### VALENCIACOLLEGE

Office for Students with Disabilities

More information on resources, support, or academic accommodations

# **Questions to Ask Your Advisor**

What's the difference between dropping a class and withdrawing from a class, and how does this impact me?
What are some things I should consider before withdrawing from a class?
What are some important academic policies that I should be aware of?     (e.g., grade forgiveness, academic probation)
What are some resources that I should be using at Valencia College if I'm struggling in my classes?
What are some resources that will help me explore different majors and careers?

• How can I raise my GPA?
• What are some things I should consider when creating my class schedule?
What are the prerequisites for my major?
<ul> <li>What are the admission requirements for my program at my transfer college/university of interest?</li> </ul>
• How do I choose my electives?

• Is my major limited or restricted access? If so, what does that mean?
• How do I know that I'm on track for graduation?
• How do I know that I've met all my graduation requirements for my major?
• How do I apply for graduation?
• How do I apply to my college/university of interest?
How do I request/submit my college transcripts?

# How Do I Run My Degree Audit?

The degree audit is a great tool to help you plan out your courses. It is a summary or audit of your degree. It will show you the classes that you have completed and the ones you have yet to complete. Here are the steps on running a degree audit. We encourage you to consult with your advisor.

- 1. Log in to Atlas.
- 2. Click on Students on the left-hand side.
- 3. Look for the Path to Graduation box and click on My Academic Progress (Degree Audit).
- 4. Click on Generate New Degree Audit.
- 5. Select the term you are currently in, click submit.
- 6. Click on the button next to the name of your degree.
- 7. Click on Generate Request.



The path

to promise

takes you

from

"what is"

to

"what can be."



Valencia College is an equal opportunity institution. We provide equal opportunity for employment and educational services to all individuals as it relates to admission to the college or to programs, any aid, benefit, or service to students or wages and other terms, conditions or privileges of employment, without regard to race, ethnicity, color, national origin, age, religion, disability, marital status, sex/gender sexual orientation, genetic information, gender identity, pregnancy, and any other factor prohibited under applicable federal, state, and local civil rights laws, rules and regulations.