

May 2020 Undergraduate Future Plans Survey

College of Engineering

Summary Report

This report presents summary results from the May 2020 Undergraduate Future Plans Survey for departments in the College of Engineering, followed by summary information on employment and further education for the college as a whole.

Highlights for the College of Engineering

- 61% of seniors in COE graduating in spring 2020 responded to the survey
- 53% of respondents in COE said they had obtained a full-time position by graduation
- COE graduates with full-time employment (excluding internships) reported an average starting salary of \$69,795 (median = \$71,250)
- 62% of COE graduates with full-time employment said they would be working in North Carolina (45% in the Research Triangle Area)
- 26% of respondents in COE indicated they were planning to go to graduate/professional school in the year after graduation
- 60% of COE graduates with definite plans for graduate/professional school said they would be attending a school in North Carolina

Department Summaries

The following table provides summary statistics for May 2020 graduates in each of the College of Engineering departments. It includes the number of students in the department who graduated in May 2020 and the number of those students who submitted the Undergraduate Future Plans Survey. It also includes the number of students who indicated that at the time of the survey they had already accepted a full-time position (including military and volunteer work [e.g., Peace Corps]), and the number who indicated they were either attending or planning on attending graduate or professional school in the coming year. Finally, it includes summary statistics on the self-reported salaries of those having accepted full-time employment.

Table 1: Department Summaries

Department	Survey Population	Survey Respondents	Response Rate	N Full Time Job	N Grad/Prof School*	25th Percentile Salary	Median Salary	75th Percentile Salary	Average Salary	N Reporting Salary
Biomedical Engineering	117	40	34.2%	15	18	58,750	66,250	68,750	63,558	13
Chemical and Biomolecular Engineering	106	70	66.0%	39	20	71,250	73,750	73,750	72,829	38
Civil, Construction, and Environmental Engineering	104	53	51.0%	34	10	57,500	62,500	66,250	60,156	32
College of Engineering Dean's Office	47	28	59.6%	12	3	58,750	58,750	68,750	62,386	11
Computer Science	163	94	57.7%	63	13	71,250	76,250	88,750	78,792	60
Edward P. Fitts Industrial & System Engineering	62	46	74.2%	31	7	66,250	71,250	73,750	70,323	31
Electrical and Computer Engineering	148	131	88.5%	63	48	66,250	73,750	86,250	71,455	55
Materials Sci & Engr	41	28	68.3%	10	9	66,250	70,000	71,250	68,500	10
Mechanical and Aerospace Engineering	250	142	56.8%	74	35	58,750	68,750	73,750	66,042	72
Nuclear Engineering	18	11	61.1%	1	7	**	**	**	**	1
COE Overall	1056	643	60.9%	342	170	63,750	71,250	76,250	69,795	323

*Includes all students planning on going to graduate/professional school in the coming year, including those who have been accepted to graduate/professional school and know where they will be going as well as those who have been accepted to at least one school but have not yet finalized their plans, those who have applied but have not yet been accepted, and those who have not yet applied but plan to do so.

**Statistics on salary information for those departments with fewer than 4 respondents reporting their salary have been excluded from the table.

Full-Time Employment (college overall)

Table 2: Name of Company/Organization

	N
3M	1
AB InBev	1
ABB	2
AFL	1
ARCO Design/Build	1
Accenture	6
Acorn Climbing, L.L.C.	1
Ajinomoto Health & Nutrition North America, Inc.	1
Albemarle Corporation	2
All 4	1
Allscripts	2
Altec Industries, Inc.	3
Amazon	4
American Engineering	1
American Enterprise Institute (AEI)	1
American Tower Corporation	1
Analog Devices Inc.	1
Anderson-Negele	1
Atlas Engineering Inc	1
AvL Technologies	1
AveXis	1
BASF	1

Table 2: Name of Company/Organization, *continued*

	N
BMW	1
BP	1
Baltimore Center Stage	1
Balzer & Associates, Inc.	2
Barry-Wehmiller Design Group, Inc.	3
Beta Technologies	1
Biogen	3
Black & Veatch	1
Bordeaux Construction Company, Inc	1
Brasfield & Gorrie	1
CACI International Inc.	1
COLLAB, LLC	2
CRB	1
CaptiveAire Systems	1
Carolina Asthma & Allergy Center	1
Carolina Civilworks Inc.	1
Carrier Global	1
Caterpillar Inc.	1
Charles Schwab Corporation	1
Cisco Systems	10
Clarkston Consulting, Inc.	1
Collier Research Corporation	2
Collins Aerospace	1
Comcast Corporation	1

Table 2: Name of Company/Organization, *continued*

	N
Confidential	1
Credit Suisse	1
Cree Inc.	5
Crenshaw Consulting Engineers, Inc.	2
Cummins	1
Cypress Semiconductor Corporation	1
Dell EMC	3
Dell Technologies	1
Department of Defense	1
Design Group	2
Deutsche Bank	1
Development & Construction Insight, LLC	1
Dewberry	1
Dominion Energy	2
Drye McGlamery Engineering, PLLC	1
Duke	1
Duke Energy	1
Duke University Health System	1
Durham VA Health Care System	1
E.W. Process (Emory Wilson Process)	1
Eastman Chemical Company	2
Eaton Corporation	2
Ecolab	1
Ellinwood + Machado Structural Engineers	1

Table 2: Name of Company/Organization, *continued*

	N
Epic	3
Epic Systems	7
Ernst & Young	1
Evergy	1
FM Global	1
Facebook	1
Fidelity investments	5
Fleet Readiness Center East	1
Food and Drug Administration	1
Fujifilm	1
Fujifilm Diosynth Biotechnologies USA Inc.	1
Garmin Ltd.	2
General Dynamics Mission Systems	1
General Electric	2
General Electric - GE Aviation	1
General Motors	1
Gilbarco Veeder-Root	2
GlaxoSmithKline	2
Goldman Sachs	1
Google	1
HCL Technologies - HCL America	1
HNTB	1
Halma plc	1
Highfill Infrastructure Engineering	1

Table 2: Name of Company/Organization, *continued*

	N
Hillrom	1
Hilti	1
Howard/Stein-Hudson Associates, Inc.	1
Huami Xi	1
Hugh Creed Associates, Inc.	1
Huntington Ingalls Industries	1
IBM	2
IPS-Integrated Project Services, LLC	1
Infosys	4
International Paper	2
Invisors	1
ltron	1
Jensen Hughes	1
Jilasoan	1
John Deere	1
Johnson & Johnson	2
Key Tech, Inc.	1
Kimley-Horn	2
Kymanox	1
Leidos	3
LexisNexis	6
Lockheed Martin Corporation	1
Longent LLC	1
MCA Services	3

Table 2: Name of Company/Organization, *continued*

	N
Manhattan Associates	1
McAdams Civil Engineering	1
Medtronic	1
Mentor Graphics	1
Merck	7
Microsoft	7
N/A	1
NASA	2
NVIDIA	1
Narvara	1
National Security Agency (NSA)	1
Naval Air Systems Command (NAVAIR)	9
Naval Air Warfare Center Aircraft Division (NAWCAD)	1
Naval Sea Systems Command (NAVSEA)	2
NetApp	1
New Relic	1
Newport News Shipbuilding	3
Norfolk Naval Shipyard	2
North Carolina Business Committee for Education (NCBCE)	1
North Carolina Department of Transportation	2
Northrop Grumman	5
Novo Nordisk	1
Omron	1
Open Intelligence	1

Table 2: Name of Company/Organization, *continued*

	N
Optum	1
PCL Construction	1
Pendergraph Machines	1
Pendo	1
Pentair	1
PepsiCo	1
Pfizer Inc.	1
Phreesia	1
Planned Systems International Inc	1
Procter & Gamble	1
Progress Rail	1
Prometheus Group	2
Proteios	1
RJ Reynolds Tobacco Company	1
RMF Engineering	2
RTI International	1
Raymond	1
Raytheon Technologies Corporation	3
Red Hat	2
Rio Tinto	1
Rock Slide USA	1
Rodgers Builders, Inc.	2
RoviSys	5
SABIC	1

Table 2: Name of Company/Organization, *continued*

	N
SAS Institute	2
SWIR Vision Systems	1
Salesforce	1
Sargent & Lundy, L.L.C.	1
Saudi Aramco	1
Schmalz Inc.	1
Schneider Electric	1
Schubert Group	1
Serco	1
Siemens	3
Signalscape, Inc.	1
Skanska USA Building Inc.	2
Slack Technologies	1
Solenis	1
Spirit AeroSystems	1
Summer Consultants, Inc.	2
Synopsys	1
TE Connectivity	1
Target Corporation	1
Teachers Insurance and Annuity Association (TIAA)	1
Texas Instruments	1
Thermo Fisher Scientific	2
ThoughtWorks	1
Timken Company	1

Table 2: Name of Company/Organization, *continued*

	N
Truist	1
UL LLC	1
United States Agency for International Development	1
United States Air Force	2
United States Army	1
United States Department of Defense	1
United States Navy	6
United States Patent and Trademark Office	1
VPT, Inc.	1
Vadum	1
Vannoy Construction	1
Venture for America	1
Veterans Health Administration	1
Volvo Group	1
WK Dickson & Co., Inc.	1
Wells Global LLC	1
WestRock	1
Wolfspeed	3
nCino	1

Table 3: Location of Company (state)

	N	%
North Carolina	208	61.5
Virginia	22	6.5
California	10	3.0
Maryland	10	3.0
Wisconsin	10	3.0
South Carolina	8	2.4
Georgia	6	1.8
Texas	6	1.8
Washington	5	1.5
Pennsylvania	4	1.2
District of Columbia	3	0.9
Massachusetts	3	0.9
Tennessee	3	0.9
Ohio	3	0.9
Florida	3	0.9
Indiana	2	0.6
Illinois	2	0.6
Kansas	2	0.6
Utah	2	0.6
New Jersey	2	0.6
Missouri	1	0.3
New York	1	0.3
Vermont	1	0.3
Colorado	1	0.3

Table 3: Location of Company (state), *continued*

	N	%
Michigan	1	0.3
Louisiana	1	0.3
Iowa	1	0.3
Alabama	1	0.3
Oregon	1	0.3
Arizona	1	0.3
Not applicable - Working remotely	1	0.3
Not applicable - Multiple states	7	2.1
Not sure	6	1.8

Table 4: Region of Company (inside/outside NC Triangle)

	N	%
Triangle	149	44.9
Outside NC	125	37.7
Other NC	58	17.5

Table 5: Job Title

	N
Aerospace Engineer	5
Aerospace Researcher	1
Analyst	1
Analyst in the Chief Operating Office: Technology Division	1
Analysts	1
Analytical Development Associate	1
Analytics Engineer	1
Application Developer	1
Application Engineer	1
Applications Engineer	2
Aspire Cohort Graduate - Software Engineer	1
Assistant Project Engineer	1
Assistant Project Manager	2
Associate	1
Associate Clinical Specialist	1
Associate Consultant	2
Associate Developer	1
Associate Distribution Engineer	2

Table 5: Job Title, *continued*

	N
Associate Electrical Engineer	1
Associate Embedded Software Engineer ~ Secure Processing	1
Associate Engineer	1
Associate Engineer - Electrical System	1
Associate Fire Protection Engineer	1
Associate Plant Engineer I	1
Associate Process Engineer	1
Associate RF Engineer	1
Associate Software Developer	4
Associate Software Engineer	4
Associate Specialist	1
Associate Specialist Manufacturing Automation	1
Associate Specialist, Engineering	1
Associate Web Developer	1
Automation Engineer	1
Automation Specialist II	1
Biomedical Engineer (Intern)	1
Bioprocess Engineer	1
Brewery Trainee	1
CEO	1
CEO/Founder	1
Chemical Engineer	1
Chemical Process Engineer	1
Civil Designer	2

Table 5: Job Title, *continued*

	N
Civil Engineering Technician	1
Civil Technician	1
Civil/Mechanical Engineering Design	1
Client Services Associate	1
Client Systems Engineer	1
Cofounder	1
Consultant Engineer	1
Consulting Engineer	1
Controls Specialist	1
Data Scientist	1
Design Engineer	2
Designer Level II	1
Development Engineer	1
Down Stream Chemical Engineer	1
Downstream Petrochemical Engineer	1
EDGE Associate - Civil/Structural Engineer I	1
Early Career Program Associate - LEAD Engineering	1
Edison Engineer	1
Edison Engineering Development Program	1
Electrical Engineer	7
Electrical Engineer I	1
Electronics Engineer	1
Engineer	3
Engineer (Launch Rotational Program)	1

Table 5: Job Title, *continued*

	N
Engineer 1	1
Engineer in Training (EIT)	2
Engineering Intern	1
Ensign	1
Entry Engineer	1
Entry Level Engineer	1
Entry Level Software Engineer	1
Field Coordinator	1
Field Engineer	2
Field Service Technician	1
Firmware Engineer	1
Flammability Testing	1
Flight Test Engineer	1
Foreign Service Health Officer	1
Foreman	1
Founder	1
Future Leaders Program Biopharmaceutical Associate	1
Graduate Electrical Engineer	1
Graduate Engineer	1
Graduate Trainee	1
Guidance, Navigation, and Control Engineer	1
Hardware Developer	1
Hardware Development Engineer	1
IT Audit, Automation and Innovation	1

Table 5: Job Title, *continued*

	N
Implementation Consultant	1
Industrial Engineer	3
Industrial Engineer 1	1
Instrumentation & Controls Engineer	1
Java Developer	1
Junior Applications Engineer	1
LAUNCH Engineer	1
LDP Supply Chain Engineer	1
Lean Engineer I	1
Lighting Apprentice	1
Management Engineer I	1
Manufacturing Associate II	1
Manufacturing Engineer	1
Materials Science Engineer	1
Mechanical Design Engineer	5
Mechanical Designer	1
Mechanical Engineer	7
Mechanical Engineer - Vibrations	1
Mechanical Engineer L	1
Mechanical Hardware Engineer	1
Mechanical Project Manager	1
Medical Assistant	1
Metrology Engineer	1
N/A	2

Table 5: Job Title, *continued*

	N
Naval Architect	2
Naval Flight Officer	1
Nuclear Propulsion Test Engineer	1
Nuclear Site Services Mechanical Engineering Intern	1
Nuclear Submarine Officer	1
O2 Engineer	1
Office Engineer	1
Officer Candidate for Surface Warfare Officer (Nuclear)	1
Operations Development Program	1
Operations Management Leadership Program	1
Operations Manager	1
Operations/Project Manager	1
PLC Programmer	1
Patent Examiner (Mechanical Engineering)	1
PhD Student	1
Pilot Trainee	1
Plant Engineer	1
Postbaccalaureate Researcher	1
Power R&D Test Engineer I	1
Practical Process Improvement Specialist II	1
Process Development Engineer	1
Process Engineer	8
Process Engineer 1	1
Process Engineer I	2

Table 5: Job Title, *continued*

	N
Process Engineer Sustaining	1
Process Improvement Engineer	1
Product Development Engineer	1
Product Engineer	2
Product Marketing Engineer	1
Product Support Engineer	1
Professional Development Program Member	1
Programmer	1
Project Engineer	5
Project Engineer I	1
Project Manager	2
Project Specialist	1
Project Specialist II	1
Propulsion Flight Test Engineer	1
Protection and Controls Engineer	1
R&D Engineer II	1
Reach Engineer	2
Reliability Engineer	1
Research Health Economist / Decision Modeler	1
Resident Field Service Engineer	1
Sale Associate	1
Sales Engineer	1
Sales Marketing Development Program - Account Manager for Siemens Energy	1
Salesforce Technology Consultant	1

Table 5: Job Title, *continued*

	N
Second Lieutenant	1
Securities Operations Analyst	1
Security Analyst	1
Security Engineer	1
Semiconductor Process Engineer	1
Senior Software Developer	1
Signals Analyst	1
Silicon Design Engineer	1
Software Consultant	1
Software Consulting Engineer	1
Software Developer	8
Software Development Engineer	3
Software Development Engineer I	1
Software Development Intern	1
Software Engineer	25
Software Engineer 1	3
Software Engineer Analyst	1
Software Engineer Associate	1
Software Engineer Consultant	1
Software Engineer I	1
Software Engineer II	1
Software Engineering 1	1
Software QA Engineer	1
Software Test Engineer	1

Table 5: Job Title, *continued*

	N
Solutions Engineer	1
Specialist Engineer	1
Staff Engineer	4
Staff Transportation Engineer	1
Strategic Professional	1
Structural Design and Analysis Engineer	1
Structural Engineer	1
Structural Engineer 1	1
Structural Engineer I	1
Student Naval Aviator	1
Student Pilot	1
Supplier Quality Engineer -I	1
Supply Chain Manager	1
Support Equipment Engineer	1
Surface Warfare Officer	1
System Engineer	1
Systems Developer Engineer	1
Systems Engineer	4
Systems Engineer I	3
Systems Test Engineer	2
Technical Associate	1
Technical Consulting Engineer	1
Technical Engineer	1
Technical Intern	1

Table 5: Job Title, *continued*

	N
Technical Sales	1
Technical Sales and Field Service Engineer	1
Technical Services Field Engineer	1
Technical Solutions Engineer	3
Technical Staff	1
Technical Support Engineer	2
Technology Associate	1
Technology Consulting Analyst	1
Technology Platform Analyst	1
Technology Technical Platform Analyst	1
Test Engineer - Automation	1
Test Equipment Engineer	1
Test Operations Engineer I	1
Training Engineer Associate	1
Transportation Engineering Associate	1
Transportation Planning and Traffic Operations Analyst	1
Validation Engineer	6
Validation Specialist II	1
Web Applications Developer	1
iOS Developer	1

Table 6: Resources Used to Help Get/Locate Job*

	N	%
Internship/externship	179	52.3
Career fair at NC State	151	44.2
LinkedIn	88	25.7
Personal connection(s) within the company	67	19.6
Family/friends/classmates/co-workers	57	16.7
Applied for job via ePack	52	15.2
Co-op experience	51	14.9
Campus or college career center	49	14.3
On-campus interviewing	46	13.5
Internet: Other	27	7.9
Employer info session on campus	26	7.6
Professional society	19	5.6
Faculty member or found job listing in an NC State dept	16	4.7
Consultation with NC State Career Counselor/Coach	14	4.1
Volunteer work	14	4.1
Employer found resume on ePack	13	3.8
Career fair off campus	10	2.9
Staffing agency	7	2.0
Student teaching experience	5	1.5
Other	15	4.4

*Respondents could select more than one resource.

Further Education (college overall)

Table 7: Status for Graduate/Professional School Attendance (among those planning to attend)

	N	%
Have been accepted and know where I'm going	151	88.8
Have been accepted but undecided	8	4.7
Have applied, but not yet been accepted	4	2.4
Have not applied but plan to do so within the next year	7	4.1

Information provided in the tables below is collected and reported only for respondents who indicated that at the time of the survey they had been accepted to graduate/professional school and knew where they would be going.

Table 8: Name of Graduate/Professional School Students will be Attending

	N
Auburn University	1
Boston College	1
Boston University	1
Carnegie Mellon University	2
Case Western Reserve University	1
Colorado State University	1
Cornell University	1
Dartmouth College	1
Duke University	4
ETH Zurich	1
East Carolina University	1
Emory University	1
Georgia Institute of Technology	4
Harvard University	1
Indiana University - Bloomington	1
Iowa State University	1
King Abdullah University of Science and Technology	4
NC State University	79
New England Law Boston	1
Purdue University	1
Stanford University	3
Temple University	1
Tulane University	1
University of Arizona	1

Table 8: Name of Graduate/Professional School Students will be Attending, *continued*

	N
University of California, Berkeley	3
University of California, Davis	1
University of California, Los Angeles	1
University of California, Santa Barbara	1
University of Colorado Boulder	2
University of Florida	1
University of Illinois at Urbana-Champaign	3
University of Maryland, College Park	1
University of Minnesota, Twin Cities	1
University of North Carolina at Chapel Hill	5
University of North Carolina at Charlotte	1
University of Oregon	1
University of Sheffield	1
University of South Carolina	1
University of Southern California	1
University of Texas at Austin	2
University of Utah	1
University of Virginia	2
University of Washington	1
University of Wisconsin-Madison	2
Virginia Polytechnic Institute and State University	4
Wake Forest University	1

Table 9: Location of Graduate/Professional School Students will be Attending

	N	%
North Carolina	91	60.3
California	11	7.3
Outside United States	6	4.0
Virginia	6	4.0
Georgia	5	3.3
Massachusetts	4	2.6
Pennsylvania	3	2.0
Colorado	3	2.0
Illinois	3	2.0
Indiana	2	1.3
Texas	2	1.3
Wisconsin	2	1.3
Alabama	1	0.7
District of Columbia	1	0.7
New York	1	0.7
New Hampshire	1	0.7
Iowa	1	0.7
Louisiana	1	0.7
Arizona	1	0.7
Florida	1	0.7
Maryland	1	0.7
Minnesota	1	0.7
Oregon	1	0.7
Utah	1	0.7

Table 9: Location of Graduate/Professional School Students will be Attending, *continued*

	N	%
Washington	1	0.7

Table 10: Type of Degree Pursuing*

	N	%
Master's	98	64.9
Doctoral	55	36.4
Professional	7	4.6

*Respondents could select more than one degree.

Table 11: Master's Degree

	N
MBA	1
MCRP	2
ME	18
MHS	1
MR	2
MS	68
MSEH	1
MSME	3
MSN	1

Table 12: Professional Degree

	N
DO	1
JD	2
MD	2
PharmD	1

Table 13: Other Degree

	N
Anesthesiologist Assistant	1

Table 14: Academic Program

	N
Aerospace Engineering	13
Agricultural and Biological Engineering	1
Analytics	1
Anesthesiology	1
Bioengineering	3
Biological Engineering	1
Biological and Biomedical Sciences	1
Biomanufacturing	3
Biomedical Engineering	6
Business Administration	1
Cellular and Molecular Pathology	1
Certified Nurse Educator	1
Chemical Engineering	6
Chemical Engineering & Materials Science	1

Table 14: Academic Program, *continued*

	N
Chemical and Biomolecular Engineering	1
Civil Engineering	4
Computer Engineering	16
Computer Science	8
Data Analytics	1
Electric Power Systems Engineering	1
Electrical Engineering	20
Electrical Engineering & Computer Science	1
Electrical Engineering - Analog Design	1
Electrical Engineering - Signal System Program	1
Electrical and Computer Engineering	5
Electrochemistry	1
Engineering	1
Engineering Management	1
Environmental Engineering	3
Environmental Health	1
Financial Engineering	1
Food Science	1
Health Informatics	1
Immunology and Molecular Pathogenesis	1
Industrial Engineering	2
Integrated Manufacturing Systems Engineering	1
Law	2
Materials Science	2

Table 14: Academic Program, *continued*

	N
Materials Science and Engineering	1
Mechanical Engineering	13
Medical Physics	1
Medicine	1
N/A	3
Networking	1
Nuclear Engineering	6
Operations Research	1
Osteopathic Medicine	1
Pharmaceutical Science	1
Pharmacy	1
Physics	1
Quantitative Biomedical Science	1
Statistics	2

For more information on the Undergraduate Future Plans Survey, contact:

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