

Chemical Engineers work in:
atmospheric research

architectural materials
battery research
bio-reactors
catalyst development
coatings
composite materials
energy alternatives
environmental control
food processing
high purity water
medical implants
microfluidics
nanotechnology
oil refining
nuclear energy
packaging
paper production
patent law
personalized medicine
petascale computing
petrochemicals
pharmaceuticals
polymers
semiconductors
shale gas
space program
sustainability metrics
textiles
tissue engineering
waste recycling
water treatment

Many Chemical Engineering Career Paths

- R & D (Academic, Industrial, Governmental)
- Process and Equipment Design
- Project Engineering
- Plant Operations, Maintenance, Controls and Instrumentation
- Plant Environmental, Safety and Health Monitoring
- Equipment Design, Fabrication And Sales
- Small Companies Such As Cosmetic And Chemical Blenders
- Legal sector (Patent Matters, Plant Guarantees, Arbitration)
- Financial Sector
(Debt & Equity Providers, M & A Projects, Insurance Companies)
- Regulatory Agencies (EPA, DEC's, Local)
- Municipal Departments (DEP/Water, Education, Hospitals, City Planning, etc.)
- Technical Writing/Reporting

Possible Career Impacts resulting from Climate Change -- *Increased Needs for Expertise*

- Safe Production of Non-Crop Based Liquid Bio-Fuels
- Electric Generation without Fossil Fuels
- Carbon Capture & Safe Long-Term Sequestration
- Water Quality Evaluation and Treatment
- Food Production and Distribution Technology
- Recycling Technology (Water, Process Streams, Discarded Products)
- Materials Selection and Fabrication
- Instrumentation and Automation
- Project Realization
- Process Design, Project Financing, Environmental Permitting
- Technology Transfer (Particularly to Developing Countries!)





Representative Organizations That Employ Chemical Engineers

<p>Plant, Infrastructure & Water Treatment Design</p> <p>Arcadis Burns & Roe CB&I Lummus (fm. ABB Lummus) CB&I Howe Baker CH2M Hill Lockwood Greene Foster Wheeler General Electric Hazen and Sawyer Pall Corp. Parsons Brinckerhoff Siemens Stone & Webster, Inc.</p>	<p>Bio-Pharmaceuticals</p> <p>Amgen Baxter International Bayer Schering Pharma AG Celgene CSL Behring Gilead Sciences Merck KGaA Novo Nordisk Sanofi S.A. Teva Pharmaceutical Industries</p>	<p>Pharmaceuticals & Personal Products</p> <p>Bayer Schering Pharma AG Bristol-Myers Squibb Colgate-Palmolive Co. Consumer Products Estée Lauder Companies GlaxoSmithKline Hoffmann-La Roche Inc. Merck & Co. Novartis Pharmaceuticals Corp. Pfizer, Inc. Procter & Gamble Warner-Lambert Co. (now part of Pfizer, Inc.)</p>
<p>Oils/fuels/lubricants</p> <p>Akzo Nobel N.V. British Petroleum Chevron ConocoPhillips (fm. Tosco, Bayway Refining) ExxonMobil Halliburton</p>	<p>Chemicals</p> <p>Air Products and Chemicals, Inc. Ashland Inc. BASF Corp. BOC Gases (now part of Linde Gases) Dow Corning Corp. DuPont - E.I. Du Pont de Nemours & Co. Hercules (now part of Ashland Inc.) ITT Corp. (fm. ITT Water - now Xylem) KMG Chemicals Lonza Olin Corp. Scott Specialty Gases, Inc. (Air Liquide) Catalyst Vendors: Johnson Matthey, Haldor Topsoe, Nalco</p>	<p>Food/Beverage</p> <p>Archer Daniels Midland Co. Mars, Inc. (makers of M&M / Mars candies) Molson Coors Brewing Co. Mondelēz International (fm. Kraft Foods) Monsanto Co. Nabisco (sub of Mondelēz International) Nestlé S.A. PepsiCo Pinnacle Foods Inc.</p>
<p>Utilities</p> <p>Con Edison KeySpan (now part of National Grid USA) National Grid USA PASNY - Power Authority of the State of N.Y. PSEG - Public Service Enterprise Group TransCanada Corp.</p>	<p>Government Services (for NYC)</p> <p>Dept of Env. Protection (DEP) Met. Transportation Authority (MTA) OLTPS - Office of Long-Term Planning and Sustainability</p> <p>Regulatory</p> <p>NYC Dept. of Env. Protection (DEP) NYS Dept. of Env. Conservation (DEC) NYS Public Service Commission (PSC)</p>	<p>Consulting</p> <p>CH2M Hill Malcolm Pirnie, Inc. (now part of Arcadis) McKinsey & Co. NanoBiz, LLC Poten & Partners</p> <p>Legal, Insurance, & Other</p> <p>Chartis Insurance (now part of AIG) Greenberg Traurig LLP Sills, Cummis & Gross P.C. Underwriters Laboratories</p>
<p>Technical Writing/Reporting/Editing</p> <p>Chemical Engineering Progress (CEP) McGraw-Hill, Inc.</p>	<p>Research Facilities</p> <p>Brookhaven National Laboratory Metro NY Area Engineering Schools</p>	