






Applied Science Careers in Chemistry




If you love **chemistry**, there are loads of careers where science is used to solve real-world problems! Here are some of the best **applied science jobs** where chemistry is key.

1. Pharmaceutical Science & Healthcare

- ◆  **Pharmacist** – Prepares and dispenses medicines to patients. (**Requires a pharmacy degree**)
- ◆  **Pharmaceutical Scientist** – Develops & tests new medicines for safety & effectiveness.
- ◆  **Toxicologist** – Studies the effects of chemicals, poisons, and drugs on humans & animals.
- ◆  **Clinical Biochemist** – Analyzes blood & bodily fluids in hospitals to diagnose diseases.




 **Workplaces:** Pharmacies, hospitals, research labs, pharmaceutical companies


2. Forensic Science & Criminal Investigation

- ◆  **Forensic Scientist** – Examines crime scene evidence (e.g., drugs, toxins, blood samples).
- ◆  **Analytical Chemist** – Identifies unknown substances (e.g., drug testing in sports & forensics).
- ◆  **Forensic Toxicologist** – Detects drugs, alcohol, and poisons in criminal cases.





 **Workplaces:** Police labs, government agencies, private forensic labs

3. Environmental & Sustainability Careers

- ◆  **Environmental Chemist** – Studies pollution & finds ways to protect the environment.
- ◆  **Water Quality Scientist** – Ensures drinking water is clean & safe.
- ◆  **Renewable Energy Scientist** – Develops **eco-friendly fuels** & battery technologies.




 **Workplaces:** Environmental agencies, renewable energy companies, government research labs


4. Industrial & Manufacturing Chemistry

- ◆  **Chemical Engineer** – Designs processes for making fuels, plastics, and medicines.
- ◆  **Materials Scientist** – Creates **new materials** for construction, electronics & clothing.
- ◆  **Cosmetic Chemist** – Develops safe & effective beauty products (e.g., skincare & makeup).
- ◆  **Food Chemist** – Works on food safety, preservatives, & nutrition.




 **Workplaces:** Factories, R&D departments, cosmetics & food companies

5. Academic & Research Careers

- ◆  **Research Chemist** – Investigates new discoveries & invents new products.
- ◆  **Science Teacher** – Teaches chemistry in schools, colleges & universities.
- ◆  **Patent Examiner** – Reviews scientific inventions to approve **patents**.

 **Workplaces:** Universities, schools, research institutions

6. Energy & Engineering Careers

- ◆  **Petroleum Chemist** – Works with **fuels & energy production**.
- ◆  **Nuclear Chemist** – Specializes in nuclear energy & radiation safety.
- ◆  **Battery Scientist** – Develops **better batteries** for electric cars & renewable energy storage.

 **Workplaces:** Power plants, energy companies, government agencies

How to Get Into These Careers

✓ **BTEC Applied Science** – A hands-on qualification that prepares you for chemistry careers

✓ **University Degrees** – Chemistry, chemical engineering, forensic science, environmental science

✓ **Apprenticeships** – Work-based training in lab work, pharmaceuticals, & engineering

🔍 Need help finding **courses or apprenticeships**? Let me know, and I'll find some options near you! 😊

If you're looking for **Applied Science courses** and **apprenticeship opportunities** in the Liverpool, Sefton, and Knowsley areas, here are some options to consider:

Applied Science Courses

1. The City of Liverpool College

- **Course:** Level 3 Extended Diploma in Applied Science
- **Details:** This two-year program offers a comprehensive curriculum covering various scientific principles, preparing students for higher education or careers in science-related fields.

2. Knowsley Community College

- **Course:** Level 2 Applied Science
- **Details:** A one-year course designed to provide foundational knowledge in science, with hands-on laboratory experience.

3. Sefton Sixth Form College

- **Details:** Offers a range of A-levels and Level 3 BTEC courses in science subjects.

4. Hugh Baird College

- **Details:** Provides various adult and professional courses, including those in the sciences, suitable for individuals aiming to enhance their skills or pursue new careers.

Apprenticeship Opportunities

1. Knowsley Community College

- **Details:** Offers a variety of apprenticeships across multiple sectors, providing practical experience alongside academic learning.

2. Knowsley Council

- **Details:** Provides information on current apprenticeship vacancies within the Knowsley borough, catering to various industries.

3. BeMore (Liverpool City Region)

- **Details:** A platform showcasing numerous apprenticeship opportunities across the Liverpool City Region, including Halton, Knowsley, Liverpool, Sefton, St Helens, and Wirral.

4. The Growth Company

- **Details:** Offers apprenticeship and traineeship opportunities, with services extending to the Liverpool City Region, including Knowsley and Sefton.

Next Steps

- **Contact Colleges:** Reach out directly to the admissions offices of the colleges mentioned above for detailed information on course content, entry requirements, and application deadlines.
- **Explore Apprenticeships:** Regularly check the provided apprenticeship platforms for the latest opportunities, and consider reaching out to their support teams for personalized guidance.
- **Attend Open Days:** Participate in open days or information sessions hosted by these institutions to gain deeper insights and clarify any queries.

Embarking on a journey in applied sciences or securing an apprenticeship can significantly enhance your career prospects. Best of luck with your educational and professional endeavours!