

CANCER BIOLOGY FOR EVERYONE CERTIFICATE

Program Description

Breakthroughs in cancer research and treatment are transforming the landscape of healthcare, opening new doors for professionals across science, engineering, and related fields. As the demand grows for innovative drugs, diagnostic tools, and medical devices, understanding the fundamental biology and treatment of cancer has become essential for anyone working in or around this dynamic sector.

Throughout this certificate program, you will explore the mechanisms driving cancer development, examine the impact of genetics on disease progression, and analyze current treatment strategies for various cancer types, including lung, colon, breast, prostate, lymphoma, and leukemia. You'll build fluency in the core language and concepts of oncology, empowering you to communicate effectively with clinicians, researchers, and industry stakeholders. Whether you are advancing your career in research, product development, or marketing, or seeking personal insight as a survivor or caregiver, you will gain practical analytical skills and knowledge that translate directly to real-world applications.

By completing this program, you will be prepared to confidently engage in meaningful conversations with cancer experts, contribute to multidisciplinary teams, and drive innovation in your field.

Key Takeaways

- Connect the molecular mechanisms of cancer to clinical presentation, progression, and treatment
- Map how inherited and acquired genetic mutations influence cancer risk and inform intervention strategies
- Evaluate screening, diagnosis, and treatment strategies across different cancer types to identify opportunities for innovation
- Apply an understanding of cancer-specific characteristics to differentiate precision medicine approaches for lung and colon cancer, breast and prostate cancer, and lymphoma and leukemia

What You'll Earn

- Cancer Biology for Everyone Certificate from Cornell Duffield College of Engineering
- 60 Professional Development Hours (6.0 CEUs)
- Clock Hours: 84

Who Should Enroll

- Biomedical engineers, physicists, chemists, and biologists seeking clinical expertise
- Cancer researchers, patients, survivors, family members, and professionals who provide services or products for cancer intervention
- Caregivers
- Oncology nurses and cancer care specialists
- Healthcare and biotech entrepreneurs

Total Investment

- 3 months to complete all courses

How to Enroll

For more information on how to enroll, please visit Cancer Biology for Everyone Certificate (<https://ecornell.cornell.edu/certificates/healthcare/cancer-biology-for-everyone/>).

Program Requirements

Code	Title	Hours
Required Courses		
eCornell MAE150	How Cancer Works	
eCornell MAE152	Cancer Genetics and Mutations	
eCornell MAE154	Cancer Treatment Fundamentals	
eCornell MAE154	Lung and Colon Cancer	
eCornell MAE156	Breast and Prostate Cancer	
eCornell MAE156	Lymphoma, Leukemia, and Other Cancers	