

Postgraduate Certificate

Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology



Postgraduate Certificate

Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/principles-chemotherapy-treatment-adverse-effects-new-therapies-gynecologic-oncology

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01

Introduction

Advances in chemotherapy, as well as the management of adverse effects, are at the forefront of developments in gynecologic oncology. These advances have led to an improvement in the management of oncological conditions by specialist physicians, as well as in patient prognosis. This program is designed to update specialists in a practical way and adapted to their needs.





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New developments in gynecologic oncology drive us to develop new programs that meet the real needs of experienced professionals, so that they can incorporate new advances into their daily practice”

Chemotherapy has been a cornerstone of gynecologic tumor treatment for many years. The great advances made in recent years in treatments, forms of administration and new biologic drugs have necessitated continuous professional development.

It is necessary for the specialist physician to be up-to-date on new therapies in gynecologic oncology, since the breadth and specificity of advances that are constantly being published and discovered must be transferred to daily medical practice.

This program is aimed at providing the professional with an update on the management of female tumor pathology.

With the outstanding participation of an internationally renowned specialist in Gynecologic Oncology, graduates will have access to a comprehensive and unique *Masterclass* as part of the most innovative didactic resources included in this Postgraduate Certificate. This will speed up and simplify the updating of students on the most recent scientific evidence in diagnosis and treatment of cancer in the female reproductive system.

This **Postgraduate Certificate in Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology** contains the most complete and updated scientific program in the market. Its most notable features are:

- ♦ The examination of clinical cases, presented by specialists in gynecologic oncology and other disciplines: The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ An update on new therapeutic procedures for oncologic pathology
- ♦ Methods for monitoring and management of the adverse effects of chemotherapy
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Bet on TECH and you will update your daily clinical practice thanks to a unique Masterclass in Gynecologic Oncology. Through the guidance of an internationally recognized expert"

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This Postgraduate Certificate may be the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in the Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology, you will obtain a Postgraduate Certificate issued by TECH Global University"

Incorporate the latest developments in the Epidemiology and Diagnosis of Endometrial Cancer into your medical practice and improve the prognosis of your patients.

It includes clinical cases and real images in high definition to bring clinical practice as close as possible to the development of the program.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02 Objectives

The main objective is to incorporate advances in gynecologic oncological pathology, ensuring that the specialist can update their knowledge in a practical way, with the latest educational technology and adapting the educational process to their real needs.





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This refresher program will provide you with the skills required for confident decision-making during the diagnostic process, and will help you to grow professionally"



General Objective

- Update the specialist on new oncological therapeutic procedures, reviewing the principles of chemotherapy and the approach to adverse effects

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Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”





Specific Objectives

- ♦ Recognize and understand the molecular bases of carcinogenesis as well as its development and metastasis production
- ♦ Define the basis of cellular growth regulation.
- ♦ Understand the role of carcinogens in the formation of genital cancer.
- ♦ Gain up-to-date knowledge of cancer genetics.
- ♦ Understand the cellular mechanisms of programmed cell death and apoptosis and their relationship and activity with malignant pathology
- ♦ Interpret the mechanisms of cancer production and distant metastasis at a molecular level.
- ♦ Identify the origins of genetic alterations that provoke cancer.
- ♦ Identify the epigenetic changes and oncogenes related with genital tract tumor pathology
- ♦ Explain the mechanisms tumor neoformation in blood vessels.
- ♦ Recognize respiratory symptomatology, such as that caused by pleural effusion, in the treatment of gynecologic cancer.
- ♦ Identify the essentials for the use of chemotherapy in gynecologic oncology as well as adverse effects and complications
- ♦ Identify the basic factors that are involved in chemotherapy treatment.
- ♦ Highlight the influence of chemotherapy in the cellular cycle.
- ♦ Identify the action mechanisms of antineoplastic agents.
- ♦ Recognize the mechanisms for the resistance of medical treatments in gynecologic cancer.
- ♦ Gain up-to-date knowledge of toxicity and side effects
- ♦ Review the available antineoplastic drugs and their characteristics.
- ♦ Identify cases in which patient observation can be used without using adjuvant treatment.
- ♦ Understand the role of new tests such as positron emission tomography for cervical cancer
- ♦ Evaluate the role of tumor markers such as SCC.
- ♦ Update the role of laparoscopy in the performance of radical hysterectomy and para-aortic staging lymphadenectomy for non-early tumor stages
- ♦ Evaluate the use of medical and surgical therapy in metastatic, recurrent or persistent illness.
- ♦ Study and analyze the postoperative care of patients to identify any complications early on.
- ♦ Appropriately assess the role of chemotherapy in gestational trophoblastic disease
- ♦ Manage the progression of pelvic tumor disease in the most effective way.

03

Course Management

Including renowned international directors, all the content of this program is focused on the most current clinical practice. In this way, the specialist will have access to a privileged teaching content, enriched with a multitude of real examples and practical cases analyzed. In this way, the most outstanding advances in Gynecologic Oncology can be incorporated into daily practice, endorsed by recognized experts with multiple recognitions and accumulated clinical merits.



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Get up-to-date with the latest advances in Gynecologic Oncology, supported by the experience of leading specialists in the field"

International Guest Director

Dr. Anil K. Sood is a leading gynecologic oncologist and scientist internationally recognized for his contributions to the study and treatment of Ovarian Cancer. In this regard, he has served as Vice Chair of Translational Research in the Departments of Gynecologic Oncology and Cancer Biology at The University of Texas MD Anderson Cancer Center, where he has also served as Co-Director of the RNA Interference and Non-Coding RNA Center. In addition, he has directed the Blanton-Davis Multidisciplinary Ovarian Cancer Research Program and co-led the Ovarian Cancer Moon Shot Program. In fact, his research focus has been on Cancer Biology, with emphasis on Angiogenesis, Metastasis and RNAi Therapy.

He has also pioneered the development of new strategies for the delivery of interfering RNA (siRNA) in cancer treatments, achieving significant advances in the creation of targeted therapies for targets previously considered “untreatable”. His research has also addressed the influence of Neuroendocrine Stress on tumor growth and the mechanisms of resistance to anticancer treatments. This research has allowed crucial advances in the understanding of how the tumor microenvironment and neural effects impact the progression of Gynecologic Cancer.

He is the recipient of multiple awards, including the Research Professor Award from the American Cancer Society and the Claudia Cohen Research Foundation Prize for Outstanding Researcher in Gynecologic Cancer. In turn, he has contributed more than 35 book chapters and numerous peer-reviewed scientific publications, as well as filing 11 patents and technology licenses. In short, his work has been instrumental in academia and clinical practice, where he has continued to share his expertise as an invited lecturer and leader in Gynecologic Cancer research.



Dr. Sood, Anil K.

- Vice Chair of Translational Research at MD Anderson Cancer Center, Texas, United States
- Co-Director of the Center for RNA Interference and Non-Coding RNA at MD Anderson Cancer Center
- Director of the Blanton-Davis Multidisciplinary Ovarian Cancer Research Program
- Co-Director of the Ovarian Cancer Moon Shot Program
- Fellow in Gynecologic Oncology at the University of Iowa Hospitals
- Doctor of Medicine from the University of North Carolina
- Member of: American Society for Clinical Investigation (ASCI), American Association for the Advancement of Science (AAAS) and Association of American Physicians (AAP)

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Thanks to TECH you will be able to learn with the best professionals in the world"

International Guest Director

Dr. Allan Covens is an international eminence in the field of **Gynecologic Oncology**. Throughout his distinguished professional career, the expert has investigated **germ cell tumors, Gestational Trophoblastic Disease, Cervical Cancer**, as well as radical and reconstructive surgical techniques. In particular, he is a reference for his medical innovations that, after different types of surgeries, aim at preserving the fertility of patients. Thanks to these contributions, he has accumulated more than 32 awards and grants.

In addition, this eminent specialist has performed **live interventions on several continents** bringing his medical contributions to nearly 30 countries worldwide through master lectures. He is also the **author of more than 135 peer-reviewed publications** and has participated in 16 textbooks on Gynecologic Oncology. Another of his works is a DVD/book on advanced laparoscopic techniques in this field of women's health.

Likewise, Dr. Covens has chaired the **Division of Gynecologic Oncology** at the University of Toronto and **Sunnybrook Health Sciences Center**. At the latter institution, he directed his fellowship to prepare potential scientists for 13 years. He also serves on the board of the Global Curriculum Review Committee and coordinates the Rare Tumor Committee. He is also a member of **MAGIC**, a multidisciplinary team that **develops protocols for malignant germ cell tumors**.

In addition, this distinguished scientist is on the **editorial board** of the **Cancer journal** and reviews articles for **Lancet Oncology, Gynecologic Oncology, International Journal of Gynecologic Cancer**, among many other specialized publications.



Dr. Covens, Allan

- Director of Gynecologic Oncology at the Sunnybrook Center from the University of Toronto, Canada.
- Advisor to Moi University, Eldoret, Kenya
- Past President of the International Gynecologic Cancer Society (IGCS)
- Advisor to the Editorial Board of the Cancer journal
- Specialist in Obstetrics and Gynecology from the University of Western Ontario
- Medical Degree from the University of Toronto
- Research Fellowship in Gynecologic Oncology at the University of Toronto/McMaster's
- Member of: Rare Tumor Committee, Gynecology Committee, Cervical and Gestational Trophoblastic Committee of the NRG.



Thanks to TECH you will be able to learn with the best professionals in the world"

04

Structure and Content

The syllabus has been designed by a team of professionals aware of the importance of medical education in oncological therapeutic procedures, and who are committed to excellent teaching using new educational technologies.





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This Postgraduate Certificate in Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology contains the most complete and up-to-date scientific program on the market”

Module 1. Biological Basis of Cancer

- 1.1. Cell Growth Regulation
- 1.2. Carcinogenesis and Carcinogens
- 1.3. Genetics of Cancer
- 1.4. Mechanisms of Apoptosis and Programmed Cell Death
- 1.5. Molecular Mechanisms of Cancer Production and Metastasis
- 1.6. Origin of Genetic Alterations
- 1.7. Epigenetic Changes and Oncogenes
- 1.8. Angiogenesis

Module 2. Basis of Chemotherapy Treatment, Adverse Effects and New Therapies

- 2.1. Introduction
- 2.2. Justification for the Use of Chemotherapy
- 2.3. Development of Cancer and the Influence of Chemotherapy
 - 2.3.1. Tumor Growth
 - 2.3.2. Cellular Cycle
 - 2.3.3. Specific Drugs for each of the Cellular Phases
- 2.4. Factors that Influence Treatment
 - 2.4.1. Tumor Characteristics
 - 2.4.2. Patient Tolerance
 - 2.4.3. Treatment Objectives
 - 2.4.4. Pharmacological Factors and Administration Routes
- 2.5. Principles of Resistance to Drugs
- 2.6. Combined Therapies
- 2.7. Treatment or Dosis Adjustments
- 2.8. Drug Toxicity
- 2.9. General Management of Secondary Effects and Complications of Chemotherapy



- 2.10. Antineoplastic Agents in Gynecology
 - 2.10.1. Alkylating Agents
 - 2.10.2. Antibiotics
 - 2.10.3. Antimetabolites
 - 2.10.4. Plant Alkaloids
 - 2.10.5. Topoisomerase 1 Inhibitors
 - 2.10.6. Antiangiogenic Drugs
 - 2.10.7. PARP Inhibitors
 - 2.10.8. Tyrosine Kinase Inhibitors
 - 2.10.9. Other Drugs
- 2.11. Future Indications

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A unique, key, and decisive educational experience to boost your professional development”

05

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

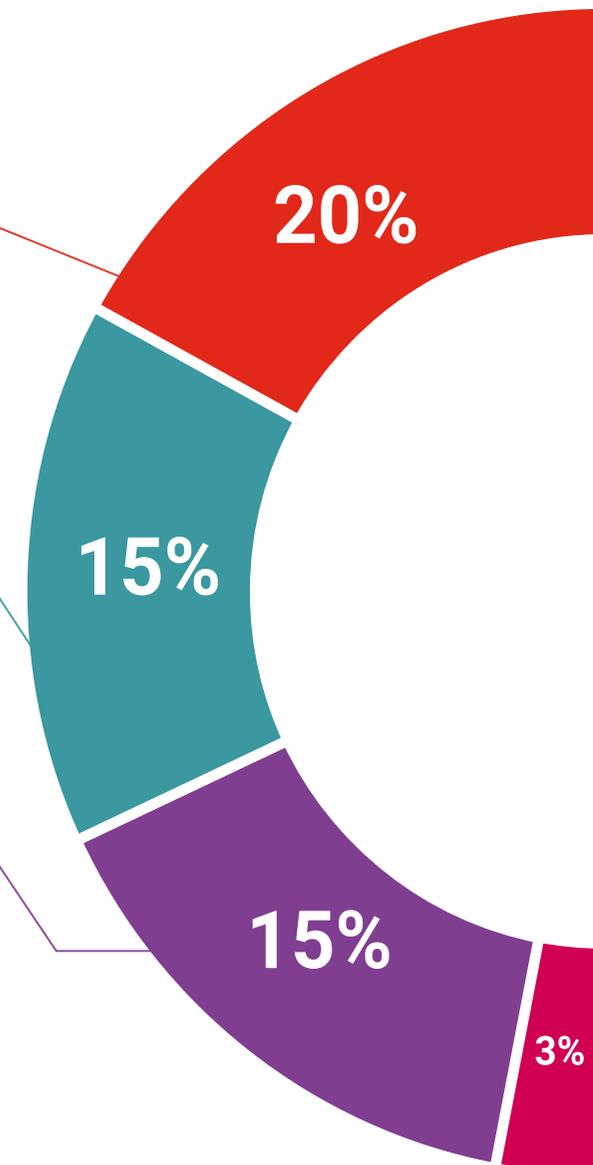
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

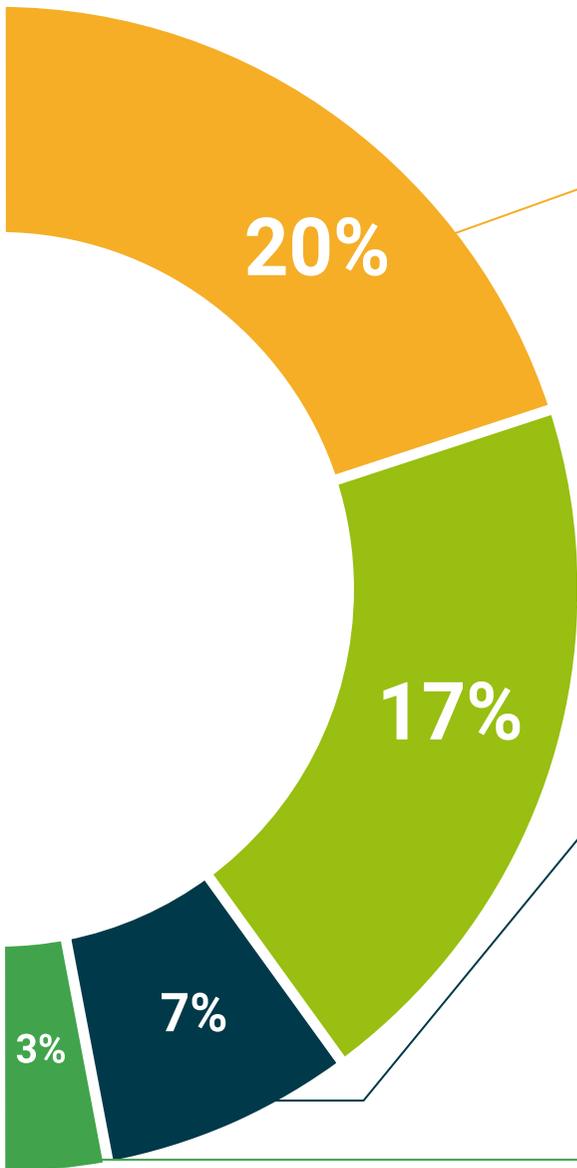
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Certificate in Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a **Postgraduate Certificate in Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology**

Modality: **online**

Duration: **6 weeks**

Accreditation: **8 ECTS**





Postgraduate Certificate

Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Principles of Chemotherapy, Adverse Effects and New Therapies in Gynecologic Oncology