

Certificate and Course Catalog



PGS

Professional Gaming Society
1550 Wilson Boulevard, Suite 700, Arlington, VA 22209

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Introduction to Our Programs

PGS offers a variety of courses for the professional gamer. These courses range from certificate classes on the basics of game design, to courses on gaming specific topics such as public health or cyber. These courses provide a way to begin your journey in the profession, or to explore complex game design topics in depth. All of our courses are taught by current practitioners in the field, who base their teaching on their real-world experience. The courses generally run from three to five days in length. This is a unique opportunity to learn from the “best of the best” in gaming on a topic that is not well covered another commercial professional education sources.

Benefits include:

- Networking and career long mentorship. Both the other students in the course and our professors continue their engagement and support long after the course has finished. Our professors are connected to the larger gaming community and aware of opportunities within it
- Certificates for our five-day general and cyber courses that prove your seriousness and intent on building skills in professional gaming
- A broad range of perspectives and knowledge on professional gaming, and the special topics
- The opportunity to engage in game design discussions with some of the experts in the field

For more information about our offerings, contact Tina Yan at tina.yan@mors.org.

We also offer customized training opportunities!

PGS has created custom training programs on professional gaming for a variety of businesses and government organizations, both domestic and international. If you would like to explore setting up a custom, private course for your organization, please contact Ms. Tina Yan at tina.yan@mors.org.



This seal denotes that MORS/PGS has partnered with Virginia Tech to offer this certificate. Participants in the five day general and cyber courses will receive a certificate of completion and a number of Continuing Education Units (CEUs) from Virginia Tech, in accordance with the number of contact hours.

Certificate in Wargaming



Overview

The Certificate in Wargaming is a five-day course designed to enhance analyst capability and knowledge in multiple aspects of professional games, including research, design, development, execution, analysis, and reporting. Through a combination of lectures and exercises, participants will learn the theory behind wargames before diving into research design and execution. Building on Peter Perla’s theory of the “Architect, Artist, and Analyst” model for game designers, the course includes material that covers each style of wargame design. The course culminates in a practicum where participants will be divided into teams to develop and execute their own game for an assigned analytical problem.

Objectives

Our expert instructors will guide participants through the key aspects of wargaming and aid them in creating their own game on the final day of the course. Along the way, participants will learn about the following:

- Defining a wargame
- A brief history of wargames
- Building blocks of game design
- Adjudication
- Strategic gaming
- Wargame graphics
- Game analysis

Tuition

Employer	Member	Non-Member
MORS Government Sponsor*	\$2,700	\$2,800
U.S. Federal Government	\$2,800	\$2,900
National Research Partner	\$2,755	\$2,850
All Others	\$2,900	\$3,000

* MORS Government Sponsor organizations include Center for Army Analysis, HQDA/DCS Program G-8; Marine Corps Combat Development and Integration; Naval Operations, N81; SAF/SA, Studies and Analysis; OSD, A&S; and DHS S&T/OSE/ORA

Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3	Day 4	Day 5
10:00 AM	Welcome	Welcome			
	What is a Wargame?	Design Basics		Game Design: Analyst	Game Design: Analyst
11:00 AM	Designing Wargames is Hard – Definitions	Design Advances Process	Game Analyses		
12:00 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:00 PM	The Axes of Wargaming	Design Advanced Elements			Practicum
2:00 PM	Designing as the Architect	Tasks to Games	Optional Topic	Strategic Gaming	
3:00 PM	Break	Break	Break	Break	
4:00 PM	Brief History of Wargame	Adjudication	Wargame Graphics	Game Design: Analyst	
5:00 PM	Wargame: Kriegspiel	Game Deconstruction	Facilitation		
6:00 PM					

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/certificates/wargaming>

Certificate in Cyber Wargaming



Overview

The Certificate in Cyber Wargaming examines the challenges of gaming cyber through a combination of lectures and practical exercises. Lectures will focus on games and game design, along with the application of game design to cyber issues. Practical exercises will give participants the chance to experience different types of cyber games, allowing them to assess requirements, plan budgets, practice response procedures, and examine player actions during play. These games will place them in decision-making roles during a simulated real-world problem—be it historical, contemporary, or projected into the future—and are currently used by decision makers within government, industry, and academia to examine policy issues and outcomes. At the end of the course, students will research, design, and present their own cyber game.

Objectives

Our expert instructors will introduce participants to the various ways that game design can be used to address the challenges of cyber operations and policy. Participants will:

- Learn how to think about cyber technology and processes to build effective games
- Build an understanding of how to represent cyber capabilities in games, including how to match the technical layers of game play with operational and strategic layers
- Build games directly addressing cyber operations
- Develop an awareness of the gaming tools available for cyber, and begin to associate specific game techniques with various cyber gaming requirements

Tuition

Employer	Member	Non-Member
MORS Government Sponsor*	\$2,700	\$2,800
U.S. Federal Government	\$2,800	\$2,900
National Research Partner	\$2,755	\$2,850
All Others	\$2,900	\$3,000

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3	Day 4	Day 5
10:00 AM	Welcome	Welcome			
11:00 AM	Introduction: Games, Game Design, and Cyber	Tactical Cyber Games, Adjudication	Cyber Gaming for Fun and Profit	Information Operations	Matrix Games
12:00 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:00 PM	Types of Wargame Designs	Cyber in Title 10 Wargames	Why Cyber Games are Wrong		Cyber-Mediated Trust in Games
2:00 PM	Game Design Fundamentals	Operational Cyber Games	Cyber Warfare, Lessons from Recent Events	Hiding and Showing Information in Games	
3:00 PM	Break	Break	Break		
4:00 PM	Exercise: Enterprise Defender			Break	Practical Game Design Exercise
5:00 PM	Discussion	Strategic Cyber Games	Cyber Gaming for Business	Information Operations	
6:00 PM					

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/certificates/cyber-wargaming>

Certificate in Homeland Security Gaming

Overview

The Certificate in Homeland Security Gaming is a three-day course that examines the challenges of gaming homeland security incidents. The course will introduce homeland security operations and how games and exercises can be used for planning, training, and analysis. Lectures will focus on games and game design with their application to homeland security incidents. The instructors will employ a series of case studies and practical exercises to explain how to design and facilitate these games. At the end of the course, the students will be able to evaluate a natural or human-caused disaster and employ design techniques to model and produce a game.

Objectives

Our expert instructors will introduce participants to various ways game designs can be used to evaluate and model various types of disasters and emergencies. Participants will:

- Learn how to evaluate a specific type of disaster by employing Homeland Security priorities and applying game design techniques
- Be familiar with the game and exercises systems of the Homeland Security Exercise Evaluation Program (HSEEP)
- Understand how to model the contingencies of specific disasters using wargame design methods
- Develop an awareness of gaming tools to develop realistic disaster-based wargames

Tuition

Employer	Member	Non-Member
MORS Government Sponsor*	\$1,620	\$1,680
U.S. Federal Government	\$1,680	\$1,740
National Research Partner	\$1,653	\$1,710
All Others	\$1,740	\$1,800

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3	
10:00 AM	Introduction: Where are we going?	Building a Game	Specific Domains & Problems	
11:00 AM			Homeland Security Gaming	Practical Advice
12:00 PM			Games & Exercises	Matrix Games
1:00 PM	Lunch	Lunch	Lunch	
2:00 PM	Examples of Games	Exercise	Facilitation	
3:00 PM	Setting the Game		Exercise & Wrap-Up	
4:00 PM	Exercise	Terrorism		
5:00 PM		Weapons of Mass Destruction		
6:00 PM				

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/certificates/gaming-homeland-security>

Designing Tactical Games Course

Overview

The Designing Tactical Games Short Course is a three-day course that focuses on building tactical games. Tactical games deal with maneuver and combat during individual battles. This requires the game designer to manage large numbers of complex variables in ways that allow the players to make the appropriate Warfighting decisions. Whether this is done using computer or manual techniques, it demands no small degree of simulation—the interaction of forces, the effects of human factors and technology, and the effects of the environment on combat. Any good wargame strives to produce realistic adjudications and outcomes, but the realism of tactical games is tested even more stringently because the players can more easily relate game mechanics and adjudication to their own personal experiences. All of this makes designing tactical games different—and even more challenging—than designing operational or strategic games. This class will examine some of these challenges and possible solutions in both theoretical and practical terms.

Objectives

Our expert instructors will address tactical games according to the different combat domains: ground, naval, and air. Participants will learn varying aspects of game design and explore future challenges from these perspectives, including but not limited to:

- **Exploratory games:** Games to create or test new tactics, weapon systems, or operational concepts
- **Ground games:** How good design must address basic concepts such as mission, time, space, forces, and command relationships; How to bring all the variables together to create a realistic tactical environment for players to engage in ground warfare; and Different ways of representing ground combat based on a wide range of commercial and professional games
- **Air and Naval games:** Integration of multi-domain operations (MDO) from space to surface into the overall air-battle kill chain; How do build games that focus on air combat operations, and air combat operations in support of ground forces; Methods for abstracting and estimating air combat values; and Putting ordnance on not only the target, but the entire kill chain, from identification to battle damage assessment

Tuition

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3
10:00 AM	Welcome	Defining the Air War in a Joint Environment	Issues in Designing Modern Naval Games
	Designing Tactical Games: What We Can Learn		
11:00 AM		Introduction to Air War	
	Lunch	Lunch	Lunch
12:00 PM			
1:00 PM	Designing Tactical Games: The Variables	Air to Air Games and Adjudication	Exercise
2:00 PM			
	Break	Break	Break
3:00 PM			
	Multidomain Operations at the Tactical Edge	Operational Air Games	Building Blocks of Modern Naval Games
4:00 PM			
	Learning by Doing		
5:00 PM			
6:00 PM			

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/courses/designing-tactical-games>

Gaming Cyber and Information Operations Short Course

Overview

The Gaming Cyber and Information Operations Short Course is a three-day course that focuses on building professional games designed to explore, train, or educate on issues surrounding cyber security and information operations. Oftentimes, cyber games are seen solely through the lens of computer-based games, and information operations games are thought to be too hard to execute and adjudicate. This course strives to dispel those beliefs and posits that manual games that focus on organization, conceptualization, and experimentation have a place in these spaces as well. The course will consist of three primary sections: game design, gaming cyber security at the tactical, operational, and strategic levels, and gaming information operations. A combination of lectures and exercises will enhance the learning process.

Objectives

Our expert instructor will teach participants how to build the best game for a sponsor's objectives by focusing on the following topics:

- Understanding the types of games that are available and how they relate to gaming at the strategic, operational, and tactical levels of cyber
- Building games that focus on information operations, or incorporating information operations into large game systems
- The role of matrix games
- How to build realistic tactical games without becoming overwhelmed by details
- How to build analytical tools for tactical adjudication of cyber games
- Handling adjudication of social engineering and deception

Tuition

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MORS Government Sponsor*	\$1,620	\$1,680
U.S. Federal Government	\$1,680	\$1,740
National Research Partner	\$1,653	\$1,710
All Others	\$1,740	\$1,800

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3		
10:00 AM	Welcome	Introduction: Cyber and Games	Exercise: Enterprise Defender		
11:00 AM	Information Operations in Games	Designing Cyber Games			
12:00 PM	Lunch	Lunch	Lunch		
1:00 PM	Exercise: Information Operations	Designing C-Suite Cyber Games	Adjudication		
2:00 PM			Break	Break	Exercise: Adjudication
3:00 PM	Information Operations in Games	Strategic, Operational, and Tactical Games	Break		
4:00 PM			Cyber in Games/ Matrix Games		
5:00 PM	Practicum: Building Cyber Games				
6:00 PM					

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/courses/gaming-cyber-and-information-operations>

Gaming Weapons of Mass Destruction Course – From Policy to Practice

Overview

The Gaming Weapons of Mass Destruction (WMD – defined as Nuclear, Chemical, and Biological agents) will be a three-day course focused on developing and executing games related to WMD in all its forms. While the basics of WMD capabilities and game design will be discussed, this will be a course focused on the intersection of WMD and gaming. It will not be either a WMD or gaming course; for those topics see other offerings.

No prior experience is required for this course, though a basic familiarity with various agents and their effects would be helpful, as would a basic understanding of professional gaming and how it is used. The instructors will adapt in real time to class requirements (e.g., if the class is interested in animal and plant targets, the instructors have extensive experience in designing games on those subjects as well).

Objectives

- Understanding the unique attributes of WMD and how they affect game design, both for games focused on WMD as well as WMD played in other games.
- How to integrate technical data and information into games.
- Games as a tool for response preparedness, both at the tactical and operational level of war.
- Building games on WMD policy, deterrence, as well as countermeasures and response.
- Unique attributes of chemical, biological, or nuclear games including a discussion of the various forms of nuclear games and their application to other agents.

Tuition

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MORS Government Sponsor*	\$1,620	\$1,680
U.S. Federal Government	\$1,680	\$1,740
National Research Partner	\$1,653	\$1,710
All Others	\$1,740	\$1,800

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3
10:00 AM	Welcome & Introductions	Adjudication of Engineering and Environmental Factors	WMD Response Operations: Defensive Preparation Games
	The Basics of WMD		
11:00 AM			
	Lunch	Weapons Effects Estimates	
12:00 PM	Basics of Game Design & How WMD Affects It	Lunch	Lunch
		Break	WMD Response Operations: Designing Response Games
1:00 PM			
	Types of WMD Games		
2:00 PM	Break	Advanced Biological Weapons & How They Factor into Game Design	Break
3:00 PM	Adjudication & Calculating WMD Effects		
4:00 PM	Practical Exercise: Designing a Game with WMD	Incorporating WMD into "Normal" Games	Design Exercise
5:00 PM			
6:00 PM			

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/courses/wmd>

Gaming Emergency Response to Disease Course

Overview

The Gaming Emergency Response to Disease Short Course is a three-day course focused on the application of professional games to problems associated with public health response. It covers pandemic response games—both national and international—as well as the problems of novel and unique organisms, biological warfare and terrorism, mental health, and chronic disease games.

Objectives

Our expert instructors will teach participants how to identify unique and challenging aspects involved in designing games involving all elements of published health response, and provide solutions to these challenges. The course will incorporate current and emerging lessons from the COVID-19 pandemic response.

Tuition

Employer	Member	Non-Member
MORS Government Sponsor*	\$1,620	\$1,680
U.S. Federal Government	\$1,680	\$1,740
National Research Partner	\$1,653	\$1,710
All Others	\$1,740	\$1,800

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Draft Agenda

Time (Eastern)	Day 1	Day 2	Day 3
10:00 AM	Welcome	Strategic, Operational, and Tactical Game Examples	Emergency Response Process
	The Problem of Disease Response		
11:00 AM			
12:00 PM	Lunch	Lunch	Lunch
1:00 PM	Game Design Fundamentals	Exercise: Nature or Nurture	Disease and Emergency Response
	Ways to Apply Games to Disease Response		
2:00 PM			Emergency Response Games
3:00 PM	Break	Break	Break
	Basic Biology and Epidemiology in Games	Matrix Games	Exercise: Building Emergency Response Games
4:00 PM			
5:00 PM			Exercise: Building a Disease Response Game
6:00 PM			

Register: <https://professionalgamingsociety.mors.org/pgs/professional-development/courses/gaming-emergency-response-to-disease>