Extended Education

Summer 2017 Course Offerings

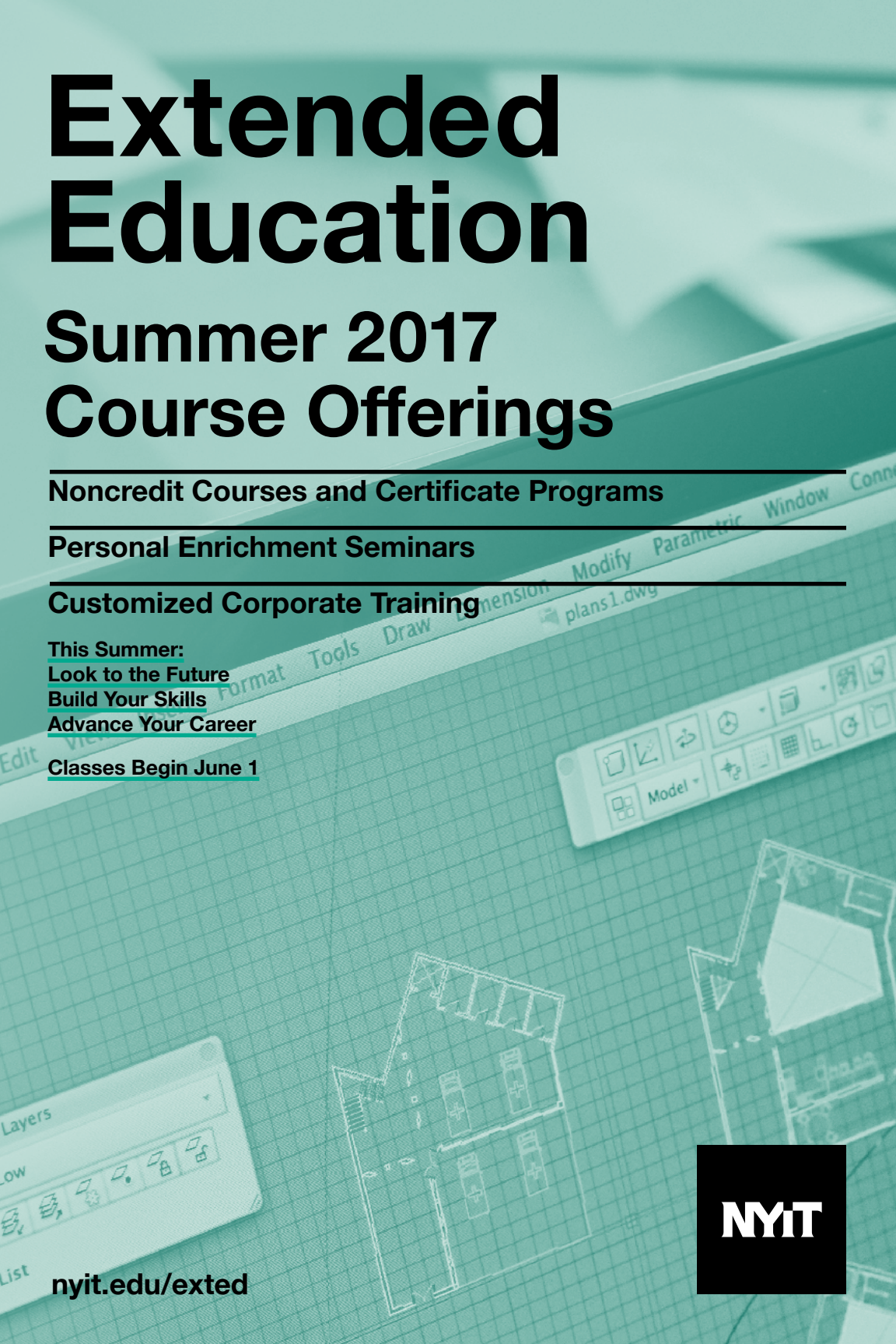
Noncredit Courses and Certificate Programs

Personal Enrichment Seminars

Customized Corporate Training

This Summer:
Look to the Future
Build Your Skills
Advance Your Career

Classes Begin June 1



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NYIT

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What is Extended Education?

Extended Education offers quality programs designed to meet the needs of part-time, nontraditional student populations. Our Noncredit courses draw upon the curricular strengths of NYIT to provide professional training and personal enrichment in architecture, AutoCAD, corporate training, dance, driver education, engineering, heavy equipment, interior decorating, project management, Revit, and more. Courses are offered at convenient times and affordable rates at campus locations in the New York metropolitan area.

We invite you to explore our course offerings and discover the ways that NYIT's Extended Education program can assist you in advancing your educational and career goals. For further information about our courses and programs or to speak to a counselor, call **516.686.7490** or visit **www.nyit.edu/exted**.

Corporate Training

Extended Education courses can upgrade the skills and knowledge base of your workforce. You can obtain greater employee satisfaction and improved work performance through existing or custom-designed programs in AutoCAD, business, engineering, or interior design, among other areas. Flexible course schedules (days, evenings, or weekends) allow you to find a time that is best for you. Courses may be conducted at your facility or at our conveniently located campuses on Long Island and Manhattan.

To find out how we can help with your corporate training needs, call **516.686.7491** or email **jknowles@nyit.edu**.

New this Summer!

General Contracting & Construction Standards Certificate, see **page 9**.

Heavy Equipment Operator Certificate, see **page 9**.

For architects and engineers, online self-study courses:
Rockefeller Center: City Within a City; The Woolworth Building: At Home in the Clouds; Pennsylvania Station; Frank Lloyd Wright's Masterpiece: The S.C. Johnson Wax Administration Building; Audubon House: From Here to Sustainability; and Light Gauge Metal Framing: The Sustainable Alternative. Onsite—Presidents on the Rocks: The Making of Mount Rushmore, see **page 10–12**.

For engineers:
Utilizing AutoCAD & Autodesk Inventor 2017 and Revit MEP Fundamentals, see **pages 4, 9, and 18**

For Interior Decorators
Revit & Interior Design, see **page 6**.

For Managers and Directors
Certificate in Leadership & Project Management, see **page 9**.

Productivity & Organization Using Smart phones and Design Thinking"
A Creative Approach to Problem Solving, see **page 18**

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Noncredit Certificate Programs

Certificate AutoCAD 2017

This certificate is designed to build job mastery for the practicing construction professional architect, designer, engineer, programmer, or technician. The courses presume no previous background in the use of AutoCAD, but those who enroll are expected to have basic computer skills and knowledge of the basic principles of drafting. To earn the certificate in AutoCAD 2017, each participant must complete all four courses, which may be taken in different semesters. Courses also may be taken individually for skill enhancement.

**Note: These courses are registered and approved by the AIA for professional continuing education, but are not approved for license renewal by the New York state licensing board for non-HSW credit. All classes must be attended for CES credit.*

XCAD-023 AutoCAD Level I

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13; 6 – 9 p.m.

Section: M01 (Manhattan) Wednesdays: June 7, 14, 21, 28, July 5, 12; 6 – 9 p.m.

During this hands-on course, architect, engineers, drafters, and design professionals use **AutoCAD 2017** and learn about the tools and techniques necessary to complete and edit production drawings using basic 2-D commands. **Fee: $395**

XCAD-024 AutoCAD Level II Part A

Section: W01 (Old Westbury) Thursdays: July 20, 27, August 3, 10, 17, 24; 6 – 9 p.m.

Section: M01 (Manhattan) Wednesdays: July 19, 26, August 2, 9, 16, 23; 6 – 9 p.m.

In this intermediate course, participants use **AutoCAD 2017** and expand on basic 2-D commands to refine and edit production drawings. **Fee: $395**

XCAD-025 AutoCAD Level II Part B*

Section: W01 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11, 18; 6 – 9 p.m.

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18; 6 – 9 p.m.

As a continuation of the **AutoCAD 2017** Level II Part A, this course expands participants' knowledge of advanced 2-D commands to increase their customizing ability and productivity. **Fee: $395**

XCAD-026 AutoCAD III: 3-D Modeling and Rendering

Section: W01 (Old Westbury) Tuesdays: July 25, August 1, 8, 15, 22, 29; 6 – 9 p.m.

Section: M01 (Manhattan) Tuesdays: July 25, August 1, 8, 15, 22, 29; 6 – 9 p.m.

Using **AutoCAD 2017**, learn to use the 3-D commands to create and use drawing planes. Gain skills to render surface and solid models. **Fee: $395**

XCAD-027 AutoCAD Advanced 3-D

Please see description of course on **page 18**.

Certificate Revit Architecture 2017

This certificate is designed to build job mastery for the practicing construction professional architect, designer, engineer, programmer, or technician. The courses presume no previous background in the use of Revit, but those who enroll are expected to have basic computer skills and knowledge of the basic principles of drafting. To earn the certificate in Revit Architecture 2017, each participant must complete all three courses, which may be taken in different semesters. Courses also may be taken individually for skill enhancement.

**3-D commands will not be covered in this course.*

XCAD-029 Introduction to Revit

Section: W01 (Old Westbury) Saturdays: June 3, 10, 17, 24, July 1, 8; 9:30 a.m. – 12:30 p.m.

Section: M01 (Manhattan) Thursdays: June 8, 15, 22, 29, July 6, 13; 6 – 9 p.m.

As green building goes mainstream, government leaders are asking for tools that set minimum standards for green building. Building information modeling (BIM) is changing the way buildings are designed and constructed. Revit is the first tool you will reach for in your toolbox. This hands-on course introduces you to the fundamentals of Revit (BIM). Gain an overview of the program's features and tools. Such topics as documentation history and trends; project templates; exploring the user interface and discovering project work flow; and exploring the vast content provided right out of the box will be utilized in multiple project types. **Fee: $395**

XCAD-032 Intermediate Revit

Section: W01 (Old Westbury) Saturdays: July 15, 22, August 5, 12, 19, 26; 9:30 a.m. – 12:30 p.m.

Section: M01 (Manhattan) Thursdays: July 20, August 3, 10, 17, 24, 31; 6 – 9 p.m.

Starting where our Beginner class left us, we continue to explore the BIM aspects of Revit Architecture. This hands-on course covers topics such as Families and their components; creating, organizing, and utilizing different views; sections elevations and perspectives; schedules and project phasing tools. Here is where you learn to appreciate the power of your 'I' in BIM. Such topics as working from a sketch to create a massing study; dimensioning (temporary and permanent); stairs, ramps, and railings; creating rooms and color fill patterns; detailing and annotation will be covered. **Fee: $395**

XCAD-035 Advanced Autodesk Revit Architecture

Section: W01 (Old Westbury) Saturdays: June 3, 10, 17, 24, July 1, 8; 1 – 4 p.m.

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18; 6 – 9 p.m.

This course introduces you to more advanced concepts in Autodesk Revit software, the AEC industry's first parametric building modeler. Using Revit Beginner and Intermediate as our foundation, we will explore advanced functions of the program. Such topics as working with multiple Revit and AutoCAD files as links; implementing techniques using system families such as walls, floors, ceilings, and roofs; custom family creation and in place families; advanced scheduling functions; best practice (performing quality control on your BIM project) will be covered. *Prerequisite:* Intermediate Revit. **Fee: $395**

For Additional Revit 2017 courses, see **pages 6 and 18**.

Certificate in Interior Decoration

The certificate in interior decoration is aimed at adults who wish to pursue a new or an alternate career as an interior decorator. Upon successful completion of eight 10-week courses (five required and three electives), students will be awarded a certificate in interior decoration. The required courses are as follows: XDSG-001, XDEC-001, XDEC-002, XDEC-005, and XFSH-014. Courses meet for 10 sessions unless otherwise stated. Two five-week electives fulfill the requirement of one 10-week elective. It is recommended that required courses be taken in order for best learning comprehension. Students must apply for the certificate in interior decoration upon completion of the program (applications are available at the Office of Extended Education). Students may also take individual courses for personal enrichment. An advanced certificate in interior decoration requires that a total of 12 (10-week) courses be successfully completed.

XDSG-001 Design…Where It All Begins

Section: W01 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 9:30 a.m. – noon

Section: W02 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 6:30 – 9 p.m.

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 6:30 – 9 p.m.

This course introduces students to the fundamentals of interior decoration. Integration of form, color, and texture into a harmonious whole is at the core of this course. Spatial and three-dimensional organization is covered as well. This is a project-oriented, "learn-by-doing" program. **Fee: $305**

XDEC-001 Basic Drafting for Interior Decorators**

Section: W01 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 9:30 a.m. – noon

Section: W02 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 6:30 – 9 p.m.

Section: M01 (Manhattan) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 6:30 – 9 p.m.

Students learn the methods and techniques of basic drafting and detailing for interior space planning. Students are taught how to execute scale, room plans, reflective ceiling plans, and elevations. *Prerequisite:* XDSG-001. **Fee: $305**

XDEC-002 Interior Decorating and Applications I

Section: W01 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 9:30 a.m. – noon

Section: W02 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 6:30 – 9 p.m.

Section: M01 (Manhattan) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 6:30 – 9 p.m.

In this course, interior decoration skills are developed through a series of projects. Students begin to apply their knowledge to simple interior spaces. Emphasis is placed on function, analysis, and space planning. Students also begin to incorporate color, furniture, and finishing, while graphically representing the interior space. *Prerequisites:* XDSG-001, XDEC-001. **Fee: $305**

XDEC-005 Business Practices for Interior Decorators

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 9:30 a.m. – noon

Section: W02 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 6:30 – 9 p.m.

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 6:30 – 9 p.m.

An introduction to the many aspects involved in maintaining a successful interior decorating practice. Some topics covered include contracts, legal responsibilities, fees, marketing strategy, client interviewing, and professional organizations. **Fee: $305**

XFSH-014 Fabrics and Materials

Section: W01 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 9:30 a.m. – noon

Section: W02 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 6:30 – 9 p.m.

Section: M01 (Manhattan) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 6:30 – 9 p.m.

An overview of materials used in the decorating process, with emphasis on fabrics. The use of basic materials such as upholstery, draperies and curtains, flooring, carpeting, wall covering, and paint will be discussed, as well as execution processes including measuring, ordering, installation, and maintenance. **Fee: $305**

(NEW!) XCAD-038 Revit and Interior Design

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27; noon – 2:30 p.m.

Introduction Course to Revit, designed Specifically for Interior Designers No previous experience in Revit is required. Course designed to provide

***Equipment is required: estimated cost is $125 (not included in cost of course).*

interior design student a well-rounded though basic understanding of Revit tools and techniques. Skills derived from utilizing Revit are designed to be applied in industry and enhancing professional development. Topics include: utilizing individual lessons and project-based approach intent of class; providing the interior design student basic knowledge of Autodesk Revit tools, features, and techniques. introduction to Autodesk 360 class lesson intent: basics instruction covering modeling of floor finishes, ceilings with soffits, casework, custom reception desk, restrooms, furniture, and light fixtures. plotting project work sheets. introduction to tags, schedules, photo-realistic rendering will be preliminarily reviewed and discussed. **Fee: $425**

XDEC-004 Kitchens and Baths

Section: W01 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 6:30 – 9 p.m.

Section: M01 (Manhattan) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 6:30 – 9 p.m.

Students will be responsible for the actual development and execution of a kitchen and bathroom project. Issues to be addressed will include color, texture, function, lighting, and special considerations related specifically to kitchens and baths. *Prerequisite:* XDEC-001. **Fee: $305**

XDEC-038 Feng Shui and Healthy Living for Designers

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6; 10 a.m. – 12:30 p.m.

By applying the ancient knowledge of feng shui and green design basics to your home and workplace, you will learn to choose healthy options for you, your clients, and the planet. In this class, you will develop an awareness to select colors, shapes, textures, and accessories to uplift the energy in a space and enhance areas of your life that need improving. Students will present a visual project the last day of class. **Fee: $205**

(NEW!) XDEC-040 Basic Feng Shui

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 6:30 – 9 p.m.

This course will provide an introduction to the principles of feng shui. Students will learn how the interiors professional may apply basic corrections and adjustments according to feng shui principles. Included will be a general history; discussion of schools and methods of practice; use of color, form, and materials to give a solid foundation and understanding of the practice. No prior experience is required. **Fee: $305**

(NEW!) XDEC-042 Feng Shui Revealed

Section: W01 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 6:30 – 9 p.m.

An introduction to the basics and origins of feng shui and its importance in interior design. The energy of the space, layouts, and floor plans will be examined. Students will learn to approach interior design based on the roadmap and element theory of feng shui. Importance of sustainable design and use of green plants will be discussed. Learn how to be a better interior designer by improving your own personal energy based on feng shui principals. **Fee: $305**

(NEW!) XDEC-041 Designing Custom Closets and Home Office Spaces

Section: M01 (Manhattan) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 6:30 – 9 p.m.

Learn how to design and draw up custom closets, home offices, wall units, and garage storage. We will discuss maximizing small spaces, efficiency, functionality, and how to relate these spaces to overall decor of the home. Introduction to industry standards, materials, and construction techniques. *Prerequisite:* XDEC-001. **Fee: $305**

XDEC-029 Practical Decorating

Section: W01 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11; 9:30 a.m. – noon

Section: M01 (Manhattan) Mondays: June 5, 12, 19, 26, July 3; 6:30 – 9 p.m.

This is a course that addresses the practical world of an interior decorator. All phases of a design job—including obtaining clients, determining and fulfilling their needs, and delivering the product—will be discussed. **Fee: $205**

XDEC-027 The History of Furniture

Section: W01 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 9:30 a.m. – noon

Learn about the history of furniture dating from ancient Egypt and Greece through the Western European countries. In addition, learn about

the contributions of China and Japan. See how the evolution of furniture has influenced today's world of decorating. **Fee: $305**

XDEC-009 Resource Sampler Workshop

Section: W01 (Old Westbury)
Wednesdays: June 7, 14, 21, 28, July 5; 10 a.m. – 12:30 p.m.

Offering hands-on experience for students with a basic background in decorating, this course will consist of lectures and numerous field trips. Transportation and expenses for all field trips are the responsibility of the student. The first class will be held on campus; the remaining classes will be field trips. **Fee: $205**

XDEC-010 Accessories

Section: W01 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10; 9:30 a.m. – noon

Section: M01 (Manhattan) Wednesdays: June 7, 14, 21, 28, July 5; 6:30 – 9 p.m.

Accessories are essential in putting the finishing touches on any room. Topics will include the use of color in accessories and accent pieces; the importance of using the right artwork, flowers, collectibles, and pillows; and more. **Fee: $205**

XART-046 Color Workshop for Interior Decorators

Section: W01 (Old Westbury) Mondays: July 17, 24, 31, August 7, 14; 10 a.m. – 12:30 p.m.

This course will explore many of the aspects of color, such as the psychological and emotional responses to color and how different cultures and age groups relate to color. Students will learn about the uses of color in various industries and the relationship of color to light and texture. This understanding will help designers develop appropriate color schemes for clients. **Fee: $205**

XART-027 Portfolio Workshop—Color Rendering

Section: W01 (Old Westbury) Wednesdays: June 7, 14, 21, 28, July 5; 9:30 a.m. – noon

This course presents demonstrations of techniques, using color pencils and magic markers. It includes color rendering of interior fabrics and materials, lights and shadows, and matting of finished work. **Fee: $205**

XDEC-028 Window Fashions

Section: W01 (Old Westbury)
Wednesdays: June 7, 14, 21, 28, July 5, 12, 19, 26, August 2, 9; 9:30 a.m. – noon

Section: M01 (Manhattan) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 6:30 – 9 p.m.

Students learn about the proper specification, fabrication, and installation of soft and hard window fashions, with special emphasis on multilayered treatments. Draperies, valences, cornices, swags and jabots, blinds, shutters, shades, and trimmings will be explored and defined. Special-challenge windows, such as bay, angled top, and Palladian, are included. Students receive instruction on how to balance practical and aesthetic factors in developing the best overall design solution. The use of real-life scenarios clarifies material covered in the course. **Fee: $305**

XDEC-006 Lighting

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10; 9:30 a.m. – noon

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 6:30 – 9 p.m.

Proper lighting is vital to the success of an interior design. Types of artificial light, their location, quantity, color balance, life span, output, and other characteristics are topics that will be examined. Students will learn how to develop a lighting plan and specification schedule. A field trip to a lighting showroom may be included to enhance and clarify the material covered in class. **Fee: $305**

XCAD-023 AutoCAD for Interior Decorators

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13; 6 – 9 p.m.

Section: M01 (Manhattan) Wednesdays: June 7, 14, 21, 28, July 5, 12; 6 – 9 p.m.

See course description on **page 5**. **Fee: $395**

XCAD-024 AutoCAD Level II Part A

Section: W01 (Old Westbury) Thursdays: July 20, 27, August 3, 10, 17, 24; 6 – 9 p.m.

Section: W02 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 1, 8, 15; 10 a.m. – noon

Section: M01 (Manhattan) Wednesdays: July 19, 26, August 2, 9, 16, 23; 6 – 9 p.m.

In this intermediate course, participants use AutoCAD 2017 and expand on basic 2-D commands to refine and edit production drawings.
Fee: $395

(NEW!)

General Contracting & Construction Standards Certificate

Section: W01 (Old Westbury) Saturdays: June 10, 17, 24; 9 a.m. – 4:30 p.m.

Section: M01 (Manhattan) Saturdays: August 5, 12, 19; 9 a.m. – 4:30 p.m.

NYIT is introducing a baseline approach to General Contracting and Construction Standards (GCACS). This certificate program will provide the knowledge and skills needed by entrepreneurs, trades persons, employees of a construction firm, business owner, or homeowners as to how a general contracting business operates and/or how to hire a general contractor or construction manager for a residential or commercial businesses project. This NYIT construction-oriented class will enable you to put principles and theories into immediate action on any construction-oriented job or project. Taking the GCACS class will provide you with a core understanding of the essential elements needed to be a successful entrepreneur, business owner, or homeowner and hire a general contractor or construction manager. The GCACS class provides a comprehensive approach to understand the dynamics of the construction business structure; how to formulate a reputable company; solve the puzzle as to how to review and prepare for the business plan, bidding process; understand the RFI, RFQ, and RFP procedures. The GCACS class will provide a practical approach to better understanding how to craft a proposal, purchase order, boilerplate contracts, custom contracts, and the use of AIA contracts. Understanding contract administration and risk management will provide you with an ability to reduce your legal services costs and allow legal counselors to provide you with better contractual language to defend your company from lawsuit or defaults from clients. The GCACS class will provide you with better knowledge and tools to develop your project scheduling and planning protocols and procedures. To monitor your construction labor, materials, and profit margins necessary to be a successful construction manager and business owner. This course is registered and approved for professional continuing education for architects and engineers for license renewal. All class sessions must be attended for CE credit.
Fee: $395

Heavy Equipment Operator Certificate

These certificates attempt to immerse the student in a real construction environment with a consistent emphasis on recognizing safe conditions and safe acts. Included in the 84-hour course curriculum is a 12-hour dedicated safety course, as well as daily safety "toolbox" meetings. The course not only teaches the student how to operate all of the machines, but also practical applications are taught, including trenching, transport rigging, loading and securing cargo, demolition, tree removal, asphalt/concrete removal, blueprint reading, and the use and applications of a transit (theodolite).

Each certificate is divided into four 21-hour modules, level 1 through 4, for each piece of equipment—backhoe, excavator, payloader, and bulldozer—that focus on a number of aspects of heavy equipment operation. Each 21-hour module may be taken individually. The safety course subject matter is comprehensive and tailored to the module subject matter as the course progresses. We also look at the aspects of driving heavy equipment machines on the public roadway. Student evaluations are performed through the use of a Skills Check Sheet system. The students are given ample time to hone their skills on any and all of the tasks presented. Please call 516.686.7490 for our exclusive Flexible Scheduling option.
Fee: $2,950.00 per 21-hour module/$11,800 per 84-hour program

Leadership & Project Management Certificate

This program consisting of the Concepts of Project Management (COPM), 30 hours, and Negotiation and People Skills (NAPS), nine hours, will be provided to executives and senior managers, departmental supervisors, IT project coordinators, health care administrators, facility managers, office managers with communication-technology personnel skills to enhance and improve their team leadership and project management knowledge. Participants who complete both classes will be issued a certificate of completion equivalent to 35 hours of continuing education credits required by Project Management Institute organization (ww.PMI.org), so that participants can take an

examination to obtain a PMI, CAPM, or PMP designation. Courses can also be taken individually.

XBUS-051 Concepts of Project Management

Section: M01 (Manhattan) Fridays: June 9, 16, 23, 30; 9 a.m. – 4:30 p.m.

Master the tools used by Project Managers: work breakdown structure, critical path, task analysis, project plan, project scheduling, and more. Gain the skills needed to plan, track progress, and stay focused on the end result. Where appropriate, students will learn PMBOK terminology and how it relates to certification. Class can be utilized for the continuing education credits for Project Management Institute (PMI.org) exam requirement for designations of CAPM (Certified Assistant Project Manager) or PMP (Project Management Professional). Thirty hours of continuing education credits, 3 CEUs. **Fee: $395**

XBUS-052 Negotiation and People Skills

Section: M01 (Manhattan) Friday: July 14; 9 a.m. – 4:30 p.m.

This experiential class is intended for the participant to better understand the theory, processes and practices of negotiation, conflict resolution, and decision-making so that they can be a more effective negotiator in a wide variety of situations. The course methodology is highly participatory and utilizes class discussions and simulations in both one-on-one and group situations. The exercises will emphasize organizational settings, but skills are applicable anywhere conflict occurs. Class can be utilized for the continuing education credits for Project Management Institute (PMI.org) exam requirements for designations of CAPM (Certified Assistant Project Manager) or PMP (Project Management Professional). Nine hours of continuing education credits, 9 CEUs. **Fee: $295**

XBUS-053 Certificate in Leadership and Project Management

Section: M01 (Manhattan) Fridays: June 9, 16, 23, 30, July 14; 9 a.m. – 4:30 p.m.

Fee: $595

Noncredit Courses

American Institute of Architects Continuing Education Series (AIA-CES) Professional Development for Architects

NYIT's extended education program and the School of Architecture and Design collaborate to offer the American Institute of Architects Continuing Education Series (AIA-CES), which covers a variety of topics critical to the contemporary practice of the profession. All offerings are registered and approved by the AIA for professional continuing education credits and are valid for meeting the requirements for AIA membership and state licensure.

(NEW!) XARC-179 Rockefeller Center: City Within a City*

Section: FX01 (Self-Study Online)

LUs: 4

In this course, we will examine the background and history of the creation of Rockefeller Center in New York City. This examination will include a review of the early history of the site from colonial times, its ownership by Columbia University (aka "Upper Estate") and subsequent sale for development as a commercial complex. We will examine the initial plan to develop the complex around a new home for the Metropolitan Opera and changes to this plan resultant from the onset of the Great Depression.

The "modernist" architecture of the structures and their construction will also be discussed, in particular the work of lead project architect Raymond Hood. The magnificent art and sculpture, gardens, and public amenities will be of great interest as will be the role the center plays in the cultural life of the city it serves. The "Showplace of

**This course satisfies HSW requirements.*

the Nation"—Radio City Music Hall—and its many unique technical and aesthetic features will be discussed as well as the ancillary theaters that no longer exist. Maintenance and operations and the post–World War II westward extension of Rockefeller Center will also be highlighted. **Fee: $135**

(NEW!) XARC-178 The Woolworth Building: At Home in the Clouds*

Section: FX01 (Self-Study Online)

LUs: 10

In this course, we will examine the historical background concerning the conception, design, and construction of New York City's famed Woolworth Building. This examination will include a review of the history of the building's site on lower Broadway, the evolution of the skyscraper form in both Chicago and New York City, and the difficulties involved in creating a solid foundation in the "soup soil" of lower Manhattan using 69 reinforced concrete piers via the use of pneumatic caissons. We will also examine the structural system of the building, including the use of portal braces and the unique method of wind bracing employed by structural engineer Gunvald Aus. Furthermore, we will examine in depth and detail the architectural design of master Beaux Arts architect Cass Gilbert for the building. This examination will focus on the ornate Lobby Arcade and exterior facade and roof treatment(s). As well, we will review the efforts to restore/repair/replace these exterior elements. Our review will also include an in-depth examination of the building's mechanical, electrical, plumbing, and elevator systems, all of which were state-of-the-art in 1913 when the building opened. The life and career of the building's namesake—*Frank Winfield Woolworth*—including his motivations for creating the building, will be of particular interest. Lastly, we will review the plans to make the tower portion of the building into luxury residences. **Fee: $295**

(NEW!) XARC-177 Pennsylvania Station*

Section: FX01 (Self-Study Online)

LUs: 7

In this course, we will examine the historical background, development, construction, operation, demolition, and replacement/commercial development of New York City's Pennsylvania Station. This review will include the desire and need of the Pennsylvania Railroad Company to bring its trains into Manhattan and provide a link with its subsidiary, the Long Island Railroad. In particular, the New York Improvement and Tunnel Extension—as conceived by PRR president A.J. Cassatt—will be examined in depth and detail. This will include the tunnels under the Hudson/East Rivers and Manhattan Island, as well as the creation of the tangential New York Connecting Railroad, providing a rail link to New England via the Hell Gate Bridge.

The creation of the terminal building and yard facility will be the focus of attention. This includes the commission for a "monumental gateway" by the prestigious architectural firm of McKim, Mead & White in the Beaux Arts, neoclassical style. Both the exterior and interior design of the facility will be studied as will the decline of the station in the post–World War II era, leading ultimately to its demolition in October 1963. The aftereffects of the station's demise, including the rise of the historic preservation movement and ongoing plans for the expansion of Penn Station to the Farley Post Office Building (aka Moynihan Station) for use by Amtrak and New Jersey Transit, as well as other initiatives, will be of great interest. **Fee: $205**

XARC-176 Audubon House: From Here to Sustainability*

Section: FX01 (Self-Study Online)

LUs: 3

In this course, we will examine the creation of the "Model Green Building"—the New York City offices of the National Audubon Society (NAS) at 700 Broadway (aka Audubon House). We will review the NAS's need for a larger space (for their national headquarters) and their decision to purchase a century-old building and establish, with its design/construction, a precedent for constructing environmentally-friendly/energy-efficient buildings that others could mimic and/or improve upon. NAS's concern for the natural environment, specifically minimizing "ecodisruption" (thus protecting natural habitats for birds such as the Arctic National Wildlife Refuge [ANWR]) will also be discussed. The history of the building, its gut renovation, and facade restoration will be highlighted as will the background of the Croxton Collaborative–the New York City–based architectural design firm that pioneered the methods, materials, and systems for green buildings with Audubon House and a previous project, also in New York, the offices of the Natural Resources Defense Council (NRDC). Selection of materials, adhesives, finishes, lighting, mechanical equipment/placement, in-house recycling, daylighting techniques, voidance/minimizing use of VOCs,

promoting recycled-content products/materials, energy-efficient/saving devices/technologies, establishing design/construction criteria, integrated "team" approach to the architectural/mechanical design, etc., for the project will be discussed in depth and detail. As well, the legacy of Audubon House to the green building movement will be emphasized. **Fee: $135**

XARC-175 Light Gauge Metal Framing: The Sustainable Alternative*

Section: FX01 (Self-Study Online)

LUs: 4

In this course, we will examine the sustainability, manufacture, pros/cons, workability, and application of Light Gauge Metal Framing (LGMF). Also known as Cold-Formed Steel Framing, our review will include a comparison of traditional wood framing vs. LGMF for residential structures, in particular. This will highlight both the similarities and differences between the two most popular methods for residential framing: dimensional lumber and/or C-shaped steel members. Design standards and components used in LGMF as a "piece-for-piece" replacement for wood as well as "hybridization" will be discussed as well. In particular, we will focus on the sustainable benefits of LGMF such as recycled content/recyclability, LEED applicability, termite resistance, etc. Also, other benefits such as dimensional stability, mechanical attachment, seismic performance, price stability, fire performance, etc., will also be discussed as will the methods to overcome the thermal disadvantages of LGMF (i.e., "Thermal Bridging"). The methods of joining LGMF and systems for framing the superstructure of a residential building will be examined in depth and detail. As well, "stick-built," panelized, and/or pre-engineered systems as well as the "Prescriptive Method" for LGMF will be reviewed/discussed. **Fee: $135**

XARC-174 Frank Lloyd Wright's Masterpiece: The S.C. Johnson Wax Administration Building*

Section: FX01 (Self-Study Online)

LUs: 5

It seems somehow innocuous that a product as mundane and utilitarian as floor wax would be the catalyst for the creation of one of the greatest buildings of the 20th century, by one of the greatest architects of any century—Frank Lloyd Wright—but that's exactly what happened. It was the quintessential Wright building, with the "scoundrel genius" at his very best—and worst. What made it all possible was a product called "Glo-Coat"—a self-polishing floor wax introduced by S.C. Johnson & Son in the early 1930s. Its commercial success (at the height of the Great Depression) would allow the grandson of the founder—Hibbard F. Johnson—to pursue his ideals of enlightened capitalism by creating the "greatest office building in the world" for his employees. To do that, he would need the "greatest architect in the world." For Wright, the Johnson Wax project came at a critical juncture in his life and career. Nearing 70, it seemed his best years were behind him. Commissioned in 1936 and completed in 1939, the S.C. Johnson Wax Administration Building would prove to the world that Wright was still a force to be reckoned with, scandals, narcissism, et al. **Fee: $165**

(NEW!) XARC-180 Presidents on the Rocks: The Making of Mount Rushmore*

Section: W01 (Old Westbury) Saturday: June 17; 9 a.m. – 6 p.m.

LUs: 8

It would be remembered as the greatest work of "sculptural engineering" the world had ever seen. Indeed, the carving of Mount Rushmore required engineering knowledge materials, methods, and systems borrowed from both antiquity and the modern mining engineer. Unlike the ancient Egyptians and Greeks, however, the most effective chisel in the toolbox of the modern mountain carver would be dynamite. Gutzon Borglum learned how effectively dynamite could be used from the miners who created tunnels through the Alps, even using just blasting caps for the more delicate work. The "honeycombing" process would allow the mountain carvers to remove the granite close to the finish surface without disfiguring the granite base. The result was, to say the least, mighty impressive. The fact that the Mount Rushmore Memorial took fourteen years (1927–1941) to complete is misleading since more than half that time was due to weather conditions and/or financing problems. Most importantly, it's evidence of the power of the human will to create something from, apparently, nothing. As far as Gutzon Borglum was concerned, the figures of Washington, Jefferson, Lincoln, and Roosevelt were there all along, it was just a matter of removing the rock in front of them. **Fee: $235**

**This course satisfies HSW requirements.*

XARC-173 AUTOBAHN: Das Road*

Section: W01 (Old Westbury) Saturday: June 24; 9 a.m. – 6 p.m.

LUs: 8

One of the great ironies concerning the story of Germany's superb national road system—the Autobahn—was that the United States, with more than 20 million motor vehicles by the mid-1920s (and not enough modern roads for the ever-increasing number of cars, trucks, and buses using the out-of-date and dangerous existing road network), would have to wait until the mid-1950s to get what Germany already had by the outbreak of World War II. Even more ironic is the fact that, at the time, Germany didn't really need such a road network since private car ownership was rare, reserved for the elite of German society during both the Weimar Republic and Third Reich eras. To hear Hitler tell it, it was all his idea from the get-go. Despite the Nazi Party's earlier contempt for such a national road network, by the time they came to power in early 1933 they had recognized its propaganda and make-work value while the affordable and economical Volkswagen ("People's Car") would solve the problem of empty Autobahns. Recognizing the strategic and commercial advantages of a modern highway system from his wartime experience as Supreme Commander of Allied Forces Europe, as POTUS, Dwight D. Eisenhower would make manifest (through the Interstate Highway Act of 1956) what Germany had demonstrated to the world (a generation earlier) was possible: a limited access, high-speed, grade-crossing-less motorway extending far and wide. It was to be the first realized national highway system for the exclusive use of motor vehicles and would eventually become the model for America and the world to follow. To Germans, it's part of their heritage as "a Nation of Drivers." **Fee: $235**

XARC-172 River of Oil: The Trans-Alaska Pipeline*

Section: W01 (Old Westbury) Saturday: June 10; 9 a.m. – 6 p.m.

LUs: 8

For many Americans, it's still a living memory—lines of cars waiting for hours to get a few gallons of gas (if they didn't run out by the time they got to the pump, that is). In the wake of the Vietnam War came the oil crisis of the early 1970s, made all too personal by the Arab oil embargo of 1973. POTUS Jimmy Carter complained about the "malaise" of the era, and it seemed our best days were behind us—the greatness of America was gone. Then came the go-ahead for TAPS—the Trans-Alaska Pipeline System. Now, America's native wealth—in the form of billions of barrels of recoverable crude oil—would be tapped into and brought to market, come hell or high water. It was a call to action for not only the oil companies, whose great risks would entail great rewards, but also for the industrial and technological might of the nation and the can-do ethos of the American workman. That spirit would be severely tested in Wild Alaska's beautiful but formidable and deadly climate/geography. Some said it couldn't be done, but it was done, in just three years. Somehow, a giant pipeline project in a remote corner of the world had reminded the world of what America was capable of when its back was against the wall. It seemed the spirit of "Don't Tread on Me" was alive. **Fee: $235**

XARC-170 Maginot Line: Triumph of Military Engineering*

Section: W01 (Old Westbury) Saturday: July 1; 9 a.m. – 6 p.m.

LUs: 8

A "Maginot Line" is —a defensive barrier or strategy that inspires a false sense of security. Fear of a resurgent Germany motivated the creation of France's magnificent Maginot Line—a wonder of the world in the 1930s. Ironically, when a Frenchman (especially those who had experienced the trenches of World War I) heard those two words, "Maginot Line," during the interwar years, it instilled in them a sense of both pride and security. Even during the "Sitzkrieg" period (aka "Phony War"), the Maginot Line, with its massive reinforced concrete walls/roofs, armored turrets, formidable weaponry, and invulnerable subterranean chambers was "the place to be" when the German attack came. Come it did (on May 10, 1940), and indeed, the Maginot fortifications did exactly what they were intended to do. The failure came in the lesser fortifications (i.e., "petit ouvrages"), for the most part unable and unsuited to stop the German Blitzkrieg in the northeast. However, the older, larger fortifications (i.e., "gros ouvrages"), even when outflanked and attacked from both front and rear were formidable, so much so that not one fell to the attacking enemy. The flaw lay in watering down (to save cost) those fortifications that sought to extend the line to the North Sea and, more importantly, the failure of French generals to recognize the unfortified Ardennes as the gaping hole through which a mighty host would one day pour. Despite its shortcomings, the Maginot Line remains a triumph of military engineering. **Fee: $235**

XARC-167 Whole Lotta Shakin' Goin' On: A History of Seismicity*

Section: W01 (Old Westbury) Saturday: July 8; 9 a.m. – 6 p.m.

LUs: 8

When a moderate earthquake struck Southern California in March 1933, the effects on Long Beach, Calif., and the surrounding towns of the Los Angeles Basin were devastating. Hardest hit were the school buildings, which collapsed in on themselves from the shock of the horizontal and vertical thrusts of the quake in the soft soil. Fortunately, the temblor struck in the late afternoon when school was out for the day, but the question everyone asked, whether consciously or subconsciously, was: What if it had struck just a few hours earlier? By this time, the science of seismology—the study of earthquakes had advanced significantly—well enough to record and document the event for future study. In fact, the lessons learned from the failed structures inspired the first-ever seismic building codes to be adapted by the state of California. To those of us not in harm's way, living in "Earthquake Country" seems to be a death wish, but for those in the line of fire, it's a calculated risk. For the geologists, seismologists, architects, and engineers, the task at hand is to understand and minimize that risk. **Fee: $235**

XARC-166 Boeing 747-100: The Plane That Changed the World*

Section: W01 (Old Westbury) Saturday: July 15; 9 a.m. – 6 p.m.

LUs: 8

When the first 747-100 made its formal "rollout" in September 1968, the gathered crowd looked on in astonishment at the sheer size of the plane, many wondering how something so large would ever get off the ground. When conceived in the mid-1960s, the 747 was to serve an interim purpose. Referred to by Boeing's Chairman Bill Allen and Pan American Airways Juan Trippe as a "stopgap" airplane, the gap it was to fill was the time needed to develop the second generation of commercial jet aircraft: the Boeing 2707 SST—America's larger, faster, and further flying variable-wing version of the Anglo-French Concorde. Alas, the Boeing SST would never be realized (for various reasons) and Concorde's glory is of the past. However, the 747—the world's first wide-body (aka "Jumbo") passenger jet airliner, though subsonic—went on to become one of the most prolific, recognizable, and beloved aircraft of the last and present century. **Fee: $235**

XARC-165 TVA: The Great Experiment*

Section: W01 (Old Westbury) Saturday: July 22; 9 a.m. – 6 p.m.

LUs: 8

The Tennessee River Valley seemed to be a land that time forgot. By the time FDR was sworn in for his first term as POTUS, water was still being pumped by hand from a well and kerosene lanterns lit the valley night. To the private utility companies, the "saturation point" had already been reached when their transmission lines reached cities like Knoxville and Chattanooga. To run lines to the remote farms of the valley was just not worth the bother even if they could afford the high rates charged. This assumption was proved wrong when the Tennessee Valley Authority (TVA) and its network of hydroelectric dams and cooperatives brought cheap, plentiful, and reliable electricity to an 80,000-square-mile area. So too, the dams would serve to hold back floodwaters and create commerce on the Tennessee River. Primary goals achieved, the role of power production—a secondary goal initially—would take center stage during World War II and in the postwar years. Some saw the TVA as a dangerous experiment in socialism, others as an absolute necessity to battle the Depression and bring a stagnant, poverty-ridden, and geographically desolate region back into the fold of modern America. If the latter is used as the "Test of Progress," the great experiment of the TVA has been a resounding success. **Fee: $235**

XARC-163 Going Up! Going Down! A History of the Otis Elevator Company*

Section: W01 (Old Westbury) Saturday: July 29; 9 a.m. – 6 p.m.

LUs: 8

Probably no invention revolutionized the world in the 19th century as did the elevator. It's not that the elevator was something new, the problem was safety. Reason being the hoist ropes (often made of hemp rope) would suddenly snap sending the elevator (aka "lift") hurtling earthward. It was just by coincidence that a "master mechanic" for a Yonkers, N.Y. bedding manufacturer named Elisha Graves Otis was assigned the task of creating a lift for heavy bed frames that the world got its first "safety elevator." Now, instead of a death plunge,

**This course satisfies HSW requirements.*

a simple spring-loaded brake mechanism would engage "teeth" in the side rails if the tension in the rope was not present. So simple, yet so ingenious. **Fee: $235**

XARC-158 Penn Station: Fall from Grace*

Section: M01 (Manhattan) Friday: August 11; 9 a.m. – 6 p.m.

LUs: 8

If there was a bright side to the loss of New York City's Penn Station—McKim, Mead & White's neoclassic masterpiece that reinterpreted Rome's Baths of Caracalla as a train station's voluminous main waiting room—it was the prevention of a similar fate to its cross-town rival: Grand Central Terminal. The death sentence served on Penn Station gave life to a burgeoning historic preservation movement that is now codified in law, protecting our architectural treasures from their own fall from grace. **Fee: $235**

XARC-157 Woolworth Building: Cathedral in the Clouds*

Section: W01 (Old Westbury) Saturday: August 19; 9 a.m. – 6 p.m.

Section: M01 (Manhattan) Friday: July 21; 9 a.m. – 6 p.m.

LUs: 8

The creation and opening of the Woolworth Building in April 1913 was one of the greatest accomplishments of the pre–World War I "Progressive era" in the United States. The building not only had to be the tallest, but also the most recognizable and distinguished in its architectural design and features, both inside and out. It was a celebration of capitalism and commerce, a real-life story of a poor farm boy making good and realizing his dream. **Fee: $235**

XARC-154 Town and Country: A Garden City for America*

Section: W01 (Old Westbury) Saturday: August 26; 9 a.m. – 6 p.m.

LUs: 8

In the years before World War I, four "movements" would come together to create Forest Hills Gardens: the "Suburb in the City." The most important would be the Garden City movement made popular in Europe and England by urban theorist Ebenezer Howard. The "satellite city" he proposed was really an old idea made new. Develop on the outskirts of central cities towns that were well planned, accessible, and limited in their growth/population. **Fee: $235**

XARC-153 Magnificent Ambition: World Trade Center*

Section: M01 (Manhattan) Friday: August 4; 9 a.m. – 6 p.m.

LUs: 8

The twin towers of the World Trade Center and the complex at its base were referred to, at the time, as "The First Buildings of the 21st century" for good reason. The World Trade Center was a marvel of architectural and engineering design and innovation. From the "Giant Bathtub" (that kept the nearby Hudson River out) to the window-washing apparatus, the World Trade Center was a springboard and proving ground for contemporary design, construction, and manufacturing techniques. **Fee: $235**

XARC-152 Empire State Building: Monarch of the Sky*

Section: W01 (Old Westbury) Saturday: June 3; 9 a.m. – 6 p.m.

LUs: 8

"…I saw a romantic structure wrought by human brains and hands that is to the burning eye of the sun a rival luminary…I heard the hammer of Thor ring when the shaft began to rise upward. I saw the unconquerable steel, the flash of testing flames, the sword-like rivets…I saw countless skilled workers welding together that mighty symmetry." Helen Keller, 1931. **Fee: $235**

XARC-141 Othmar Ammann and the Great Gray Bridge*

Section: M01 (Manhattan) Friday: July 14; 9 a.m. – 6 p.m.

LUs: 8

The George Washington Bridge across the Hudson River in New York City was the most important bridge of the 20th century; not because it ended the island of Manhattan's isolation from the rest of the continent forever (it did just that), but rather because it would enable all the "unbridgeable" water gaps—from San Francisco Bay to the Mackinac Straits and even the Inland Sea of Japan—to be bridged by a long-span suspension bridges designed using "deflection theory," which the George Washington Bridge proved out. **Fee: $235**

XARC-140 Frank Lloyd Wright's House of Wax*

Section: W01 (Old Westbury) Saturday: August 5; 9 a.m. – 6 p.m.

LUs: 8

It seems somehow innocuous that a product as mundane and utilitarian as floor wax would be the catalyst for one of the greatest buildings of the 20th century, by one of the greatest architects of any century—Frank Lloyd Wright—but that's exactly what happened. It was the quintessential Wright building, with the "scoundrel genius" at his very best—and worst. **Fee: $235**

XARC-133 Spanning the Golden Gate*

Section: M01 (Manhattan) Friday: July 28; 9 a.m. – 6 p.m.

LUs: 8

It was the bridge that could not and should not be built. The Golden Gate Strait was too wide and treacherous, the fog conditions were abominable, and even if you could build a bridge, the next big earthquake would just bring it all crashing down. The odds were against it, but fortune favors the bold so it was that a bold man with a bold plan to build a bridge from San Francisco to Marin County that was both cost-effective and enduring took up the mighty task; his name was Joseph B. Strauss. **Fee: $235**

XARC-131 Grand Central: Grand by Design*

Section: M01 (Manhattan) Friday: August 18; 9 a.m. – 6 p.m

LUs: 8

Perhaps no structure in all of New York City is more integral to its existence and smooth functioning than Grand Central Terminal. Located in the heart of the city's midtown business district, fully 70 percent of the jobs located in this critical area are within walking distance of Grand Central. Though long-distance trains no longer arrive and/or depart its platforms, it serves commuters in two states and six counties, providing easy access to the metropolis it has served so well for so long. **Fee: $235**

XARC-130 Gateway Arch: Monument to a Dream*

Section: M01 (Manhattan) Friday: August 25; 9 a.m. – 6 p.m.

LUs: 8

Paris has the Eiffel Tower, Sydney has an opera house, and New York has the gracious lady in the harbor; the Statue of Liberty. But perhaps nowhere else has a structure been more transformative for a city than in St. Louis where a 630-foot-tall stainless-steel architectural sculpture stands tall in the Midwestern sun, beckoning visitors to come and celebrate the history of the city, its historic riverfront, and the expansion of the nation to the Pacific coast in the 19th century. **Fee: $235**

XARC-129 Sydney Opera House: Splendid Geometry*

Section: W01 (Old Westbury) Saturday: August 12; 9 a.m. – 6 p.m.

LUs: 8

Perhaps no building in the world is more symbolic and recognizable than the Sydney Opera House. Its creation spanned fourteen turbulent years, yet its very existence has been transformative, leaving one era in the life of the land "Down Under" behind and ushering in a new one whereby Australia has taken its rightful place among the great nations of the world since the opera house's opening in October 1973. **Fee: $235**

XARC-122 Building the Brooklyn Bridge: An Epic for the Age*

Section: M01 (Manhattan) Friday: July 7; 9 a.m. – 6 p.m.

LUs: 8

Though it was not the first suspension bridge with wire cables, cable stays, stiffening trusses, masonry towers, and anchorages, its great main span (nearly 1,600 feet) and use of steel (rather than iron) for the wire cables, suspenders, and superstructure ushered in a new age of steel construction. The same year the Brooklyn Bridge was completed (1883), the first skyscraper appeared in Chicago. The age of steel had begun. **Fee: $235**

**This course satisfies HSW requirements.*

XARC-111 Expanded Blueprint Reading*

Section: W01 (Old Westbury) Tuesday: June 27; 9 a.m. – 5 p.m.

Section: M01 (Manhattan) Tuesday: July 11; 9 a.m. – 5 p.m.

LUs: 7

This course provides more extensive coverage of the basic components of reading and understanding design and construction blueprints and plans. Topics will include types of construction documents, why construction documents are needed, layout of construction documents, drawing symbols, orthographic projections, sectional views and details, diagrams, schedules and their use, site plans, specifications, and reproduction of drawings. **Fee: $205**

XARC-102 Solar PV and Thermal Essentials*

Section: M01 (Manhattan) Tuesday and Thursday: June 20 and 22; 6 – 9 p.m.

LUs: 6

Learn the essential elements of solar photovoltaic and thermal system design and integration in this detailed, six-hour seminar. Solar PV topics include both grid-tied and off-grid systems; safety, site assessment, and site restraints; user demand; sizing and designing a system; codes; BIPV (Building Integrated PV); and installation, inspection, commissioning, and maintaining and troubleshooting a system. Solar thermal topics covered include collection, storage, and distribution for domestic hot water; space heating; commercial applications; flat plate panels and evacuated tube collectors; system sizing and components; heat storage and heat exchange tanks; closed-loop, pressurized glycol antifreeze system, and the single- and double-pump drain-back system; and a drain-down, open-loop active system will be analyzed and reviewed. **Fee: $175**

XARC-058 Insulation in Sustainable Design*

Section: W01 (Old Westbury) Wednesday: July 19; 6:30 – 8:30 p.m.

LUs: 2

This course involves how to evaluate and select insulation products based upon design considerations and characteristics such as environmental impact, health and safety, thermal, acoustical and fire characteristics, and sustainability. A review of the major insulation types and many misconceptions about insulation will also be discussed. **Fee: $65**

XARC-050 Blueprint Reading

Section W01 (Old Westbury) Wednesday: July 26; 6 – 9 p.m.

LUs: 3

This course will cover the basic components of reading and understanding design and construction blueprints and plans. Topics will include types of construction documents, why construction documents are needed, layout of construction documents, drawing symbols, orthographic projections, sectional views and details, diagrams, schedules and their use, site plans, specifications, and reproduction of drawings. **Fee: $135**

XARC-028 Universal Design: Accessible and Usable Buildings*

Section: W01 (Old Westbury) Saturday: June 24; 9:30 a.m. – 1:30 p.m.

LUs: 4

What are the aspects of architecture, engineering, and design that engender positive emotional responses among, or enable equal access by, users of contemporary spaces? Examples of the scale, proportions, materials, and color that are pleasing, affording natural light and views of nature, and that make provisions for users with disabilities will all be discussed. **Fee: $135**

Architecture

(NEW!) XCAD-037 Utilizing AutoCAD & Autodesk Inventor 2017

Section: W01 (Old Westbury) Thursdays: June 8, 15, 22, 29, July 6, 13, 20, 27; 5:30 – 8 p.m.

Designed for students that want to learn AutoCAD and Inventor 2017 and are completely new to CAD. This introduction course explores the strengths of each package and shows how they can be used in design, both separately and in combination with each other. Design Tools intended to introduce and provide students with an overview of computer-aided design using two (2) popular CAD Software packages from Autodesk: AutoCAD and Autodesk Inventor. Will cover Basic 2-D Drawing, Light 3-D Modeling Identifying Work Planes and Subtle Manipulation Defining Surfaces. Manipulation of WCS & UCS (World Coordinate

& User Coordinate System), Basic Creating and Dimensioning of 2-D Multi-View Drawings Using AutoCAD. Creating 3-D Parametric Models and 2-D Multi-View Drawings Using Autodesk's Inventor. Defining Work Sheets for Printing How to Reuse Design Information Between AutoCAD and Autodesk Inventor. **Fee: $425**

XCAD-034 Revit MEP Fundamentals

Section: W01 (Old Westbury) Tuesdays: June 6, 13, 20, 27, July 11, 18, 25, August 4, 11,18; 6 – 9 p.m.

Section: M01 (Manhattan) Mondays: June 5, 12, 19, 26, July 10, 17, 24, 31, August 7, 14; 6 – 9 p.m.

To take full advantage of Building Information Modeling (BIM), the Autodesk Revit MEP Fundamentals course has been designed to teach the concepts and principals of creating 3-D parametric models of MEP systems from engineering design through to construction documentation. This hands-on course is intended to introduce students to the software's interface and the basic HVAC, electrical, and piping/plumbing components that make the Autodesk Revit MEP software a powerful and flexible engineering modeling tool. The objective is to familiarize students with the tools necessary to create and document a complete parametric model. The examples and practices used are designed to take the student through the basics of a real world project, from linking an architectural model to an MEP template to using Revit MEP tools to design HVAC, electrical, plumbing and piping systems to create complete construction documents in 2-D or 3-D. **Fee: $625**

For Additional Revit 2017 courses see **pages 5 and 6**.

XCAD-027 AutoCAD Advanced 3-D

Section: W01 (Old Westbury) Mondays: June 5, 12, 19, 26, July 10, 17; 6 p.m. – 9 p.m.

Section: M01 (Manhattan) Tuesdays: June 6, 13, 20, 27, July 11, 18; 6 – 9 p.m.

In this advanced 18-hour course, expand on your knowledge of 3-D commands through modeling projects. This is an intensive hands-on class for experienced AutoCAD users. **Fee: $395**

For AutoCAD 2017 courses, see **page 4**.

Career Development

(NEW!) XBUS-054 Productivity and Organization Using Smartphones

or better known as "Where was it? I can't find it. I just put it here five minutes ago."

Section: W01 (Old Westbury) Wednesday: June 21; 10 – 11 a.m.

People who want to become successful need to know how to manage their time well. The purpose of this course is to help participants review their current systems and fine-tune them using various practical smartphone productivity techniques. The course focuses on two aspects of productivity: attitude adjustment and environmental engineering. Correct attitude helps an individual filter through tasks and focus on what matters the most. Environmental engineering helps individuals free their mind from tracking mundane tasks and instead focus on critical activities using smartphone apps. This allows users to constantly focus on goals and push forward through the clutter encountered in day-to-day life. Audience: Anyone. **Fee: $25**

(NEW!) XCRS-040 Design Thinking—A Creative Approach to Problem Solving and Creating Impact

Section: W01 (Old Westbury) Wednesday: July 12; 10 a.m. – 11 a.m.

Almost everything you see around you is designed; that is, it exists as a result of human thought about what is needed. Design thinking is an iterative problem-solving process of discovery, ideation, and experimentation that employs design-based techniques to gain insight and yield innovative solutions for virtually any type of organizational or business challenge. This 60-minute highly interactive workshop provides attendees with a new set of tools in finding and developing innovative alternatives for addressing strategic business problems in any domain. You will explore creativity from individual and team perspectives and identify innovation opportunities and roadblocks in organizational settings.

Interactive exercises enable hands-on learning by developing attendee's skills to conceive, organize, lead, implement, and evaluate successful projects in any engineering discipline. You will learn to be more effective and communicate with high emotional and intellectual impact and learn how to give compelling in-person presentations. Innovation and problem-solving are skills that can be learned and that is of importance in all aspects

of business. Audience: This course is targeted for architects, design engineers, research engineers, project engineers or managers, product engineers, members of the technical staff, applied scientists, and research scientists. Professionals in other areas who believe that design thinking would be valuable in their careers. **Fee: $25**

NYIT Dance

XATV-044 Ballroom Dancing for Social Occasions

Section W01 (Old Westbury) Thursdays: June 15, 22, 29, July 6, 13, 20, 27, August 3; 7 – 8:45 p.m.

This course is intended for students possessing prior experience with swing and cha-cha basics who wish to gain further experience in these dances. The course is designed to reinforce the basic skill set necessary to dance swing and cha-cha more proficiently. Higher-level figures will be introduced as the course progresses. The instructor will utilize best practice syllabus-based techniques. Emphasis will be placed on timing, feet positions, dance positions, footwork, and lead and follow. The instructor will break down and demonstrate all dance figures and combine them to form amalgamated routines. The dances covered in this course are swing and cha-cha to syncopated rhythm. These dances can be danced to time-honored classics as well as contemporary music at many social venues. Join us at NYIT and sharpen your dance skills. Instructor: Richard Fiore, Dual Licentiate, USISTD. **Fee: $80 per person**

Driver Education

XEDU-002 Driver Education

Section: W01 (Old Westbury) (For Summer 2017 dates and times, please call 516.686.7490.)

The acquisition of safe driving skills and defensive-driving awareness for private and parochial students who wish to earn the MV 285 "Blue Card," which gives eligibility for a 10 to 15 percent discount on insurance premiums with most companies. This course qualifies those who successfully complete the course to apply for a senior driver's license at age 17. **Fee: $635**

Engineering

Professional Development for Engineers

NYIT's extended education program offers the courses that will meet the continuing education requirements in New York state for professional engineers. NYIT is approved by the New York State Education Department to sponsor mandatory continuing education for professional engineers seeking license renewal.

(NEW!) XARC-179 Rockefeller Center: City Within a City

Section: FX01 (Self-Study Online)

PDH: 4

For course description, please see **page 10**.
Fee: $135

(NEW!) XARC-178 The Woolworth Building: At Home in the Clouds

Section: FX01 (Self-Study Online)

PDH: 10

For course description, please see **page 11**.
Fee: $295

(NEW!) XARC-177 Pennsylvania Station

Section: FX01 (Self-Study Online)

PDH: 7

For course description, please see **page 11**.
Fee: $205

(NEW!) XARC-180 Presidents on the Rocks: The Making of Mount Rushmore

Section: W01 (Old Westbury) Saturday: June 17; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 12**.
Fee: $235

XARC-176 Audubon House: From Here to Sustainability

Section: FX01 (Self-Study Online)

PDH: 3

For course description, please see **page 11**.
Fee: $135

XARC-175 Light Gauge Metal Framing: The Sustainable Alternative

Section: FX01 (Self-Study Online)

PDH: 4

For course description, please see **page 12**.

Fee: $135

XARC-174 Frank Lloyd Wright's Masterpiece: The S.C. Johnson Wax Administration Building

Section: FX1 (Self-Study Online)

PDH: 5

For course description, please see **page 12**.

Fee: $165

XARC-173 AUTOBAHN: Das Road

Section: W01 (Old Westbury) Saturday: June 24; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 13**.

Fee: $235

XARC-172 River of Oil: The Trans-Alaska Pipeline

Section: W01 (Old Westbury) Saturday: June 10; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 13**.

Fee: $235

XARC-170 Maginot Line: Triumph of Military Engineering

Section: W01 (Old Westbury) Saturday: July 1; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 13**.

Fee: $235

XARC-167 Whole Lotta Shakin' Goin' On: A History of Seismicity

Section: W01 (Old Westbury) Saturday: July 8; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 14**.

Fee: $235

XARC-166 Boeing 747-100: The Plane That Changed the World

Section: W01 (Old Westbury) Saturday: July 15; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 14**.

Fee: $235

XARC-165 TVA: The Great Experiment

Section: W01 (Old Westbury) Saturday: July 22; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 14**.

Fee: $235

XARC-163 Going Up! Going Down! A History of the Otis Elevator Company

Section: W01 (Old Westbury) Saturday: July 29; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 14**.

Fee: $235

XARC-158 Penn Station: Fall from Grace

Section: M01 (Manhattan) Friday: August 11; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15**.

Fee: $235

XARC-157 Woolworth Building: Cathedral in the Clouds

Section: W01 (Old Westbury) Saturday: August 19; 9 a.m. – 6 p.m.

Section: M01 (Manhattan) Friday: July 21; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15**.

Fee: $235

XARC-154 Town and Country: A Garden City for America

Section: W01 (Old Westbury) Saturday: August 26; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15**.

Fee: $235

XARC-153 Magnificent Ambition: World Trade Center

Section: M01 (Manhattan) Friday: August 4; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15**.

Fee: $235

XARC-152 Empire State Building: Monarch of the Sky

Section: W01 (Old Westbury) Saturday: June 3; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15**.
Fee: $235

XARC-141 Othmar Ammann and the Great Gray Bridge

Section: M01 (Manhattan) Friday: July 14; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 15.**
Fee: $235

XARC-140 Frank Lloyd Wright's House of Wax

Section: W01 (Old Westbury) Saturday: August 5; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 16**.
Fee: $235

XARC-133 Spanning the Golden Gate

Section: M01 (Manhattan) Friday: July 28; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 16**.
Fee: $235

XARC-131 Grand Central: Grand by Design

Section: M01 (Manhattan) Friday: August 18; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 16**.
Fee: $235

XARC-130 Gateway Arch: Monument to a Dream

Section: M01 (Manhattan) Friday: August 25; 9 a.m. – 6 p.m.

LUs: 8

For course description, please see **page 16**.
Fee: $235

XARC-129 Sydney Opera House: Splendid Geometry

Section: W01 (Old Westbury) Saturday: August 12; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 16**.
Fee: $235

XARC-122 Building the Brooklyn Bridge: An Epic for the Age

Section: M01 (Manhattan) Friday: July 7; 9 a.m. – 6 p.m.

PDH: 8

For course description, please see **page 16**.
Fee: $235

XARC-111 Expanded Blueprint Reading

Section: W01 (Old Westbury) Tuesday: June 27; 9 a.m. – 5 p.m.

Section: M01 (Manhattan) Tuesday: July 11; 9 a.m. – 5 p.m.

PDH: 7

For course description, please see **page 17**.
Fee: $205

XARC-102 Solar PV and Thermal Essentials

Section: M01 (Manhattan) Tuesday and Thursday: June 20 and 22: 6 – 9 p.m.

PDH: 6

For course description, please see **page 17**.
Fee: $175

XARC-058 Insulation in Sustainable Design

Section: W01 (Old Westbury) Wednesday: July 19; 6:30 – 8:30 p.m.

PDH: 2

For course description, please see **page 17**.
Fee: $65

XARC-050 Blueprint Reading

Section W01 (Old Westbury) Wednesday: July 26; 6 – 9 p.m.

PDH: 3

For course description, please see **page 17**.
Fee: $125

XARC-028 Universal Design: Accessible and Usable Buildings

Section: W01 (Old Westbury) Saturday: June 24; 9:30 a.m. – 1:30 p.m.

PDH: 4

For course description, please see **page 17**.
Fee: $135

Test Preparation

XEDU-002 Driver Education

Section: W01 (Old Westbury) (For Summer 2017 dates and times, please call 516.686.7490.)

The acquisition of safe driving skills and defensive-driving awareness for private and parochial students who wish to earn the MV 285 "Blue Card," which gives eligibility for a 10 to 15 percent discount on insurance premiums with most companies. This course qualifies those who successfully complete the course to apply for a senior driver's license at age 17. **Fee: $635**

About the College

New York Institute of Technology (NYIT), founded in 1955, offers undergraduate, graduate, and professional degrees in more than 100 fields of study in architecture and design, arts and sciences, education, management, osteopathic medicine, computer science and engineering, among others. A nonprofit independent, private institution of higher education, NYIT has more than 15,000 students attending campuses in Long Island and Manhattan, online, and at sites throughout the world. For more than 50 years, NYIT has been guided by its mission to:

– provide career-oriented professional education

– offer access to opportunity to all qualified students

– support applications-oriented research that benefits the larger world

Are there courses that you would like to take but don't see in this catalog? Email us at **exted@nyit.edu** to let us know. Our offerings are regularly expanded to meet the needs of our students.

Old Westbury campus

Northern Boulevard
Old Westbury, N.Y. 11568
(three traffic lights east of Glen Cove Road)

Manhattan campus

1855 Broadway
New York, N.Y. 10023
(at Broadway)

Central Islip

Carleton Avenue
Central Islip, N.Y. 11722
(next to the court buildings)

516.686.7490
nyit.edu/exted
exted@nyit.edu

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How to Register for Summer 2017

Fill out your form (at the back of this book) early to ensure desired class registration. Form should reach us five days prior to the first class.

Fax to

516.686.1144 and include credit card information.

By Mail

Mail the form, along with your check or credit card information to:

New York Institute of Technology
Extended Education/Gerry House, room 104
P.O. Box 8000
Old Westbury, NY 11568-8000

In Person

Old Westbury

Harry Schure Hall (Enrollment Services Center)
Monday – Friday, 8 a.m.–5 p.m.

Manhattan

New Technology Building, 16 W. 61st St.
(Enrollment Services Center)
Monday – Friday, 9 a.m.–5 p.m.

Online

To register online with credit card information go to **nyit.edu/extended_education/courses**

Confirmation of Registration

After you register, you will receive a confirmation in the mail with all the necessary information you will need, including time, place, room assignment, and any special instructions.

For more information, please call us at **516.686.7490** or e-mail us at **exted@nyit.edu**.

Registration Form Summer 2017

REGISTER EARLY to assure your place in the classes you want.

First name		**Last name**	
Address			
City	**State**	**Zip code**	
Phone Day		Evening	
Social security number		**Date of birth**	
E-mail			
Have you previously attended NYIT? ◯ Yes ◯ No		**If yes, when?**	
Occupation			
Company name			

Course #	Section	Name of course	Fee
		Total	

☐ **CHECK ENCLOSED: Please make checks payable to New York Institute of Technology.**

☐ **CHARGE MY CREDIT CARD (MasterCard, Visa, or American Express)**

◯ MasterCard ◯ Visa ◯ American Express

Cardholder (please print)

Card no. **Expiration date**

Authorized signature **Card security code (CSC)**

Discounts: There is a 5 percent discount for senior citizens and alumni. NYIT reserves the right to cancel any class, change class schedule, divide a class, or change instructors if necessary. Students will receive a full refund in any course in which they have enrolled that is canceled by NYIT.

Withdrawal and refund policy: No refunds will be granted for withdrawal from any Noncredit course on or after the first scheduled day of class. Withdrawal must be in writing. Telephone cancellations cannot be honored.

Collection policy: By authorizing a registration or by dropping and/or adding or withdrawing or being dismissed from the courses I registered for this semester, I agree to be charged in accordance with the schedule set forth in NYIT's online catalogs and nyit.edu with respect to payment of tuition and fees, refunds, dropping and adding courses, and, withdrawal and dismissal policies and procedures. I agree to be bound by this registration form and abide by NYIT's rules and regulations set forth in NYIT's online catalogs and nyit.edu. I agree to pay my debt to NYIT for any amounts due for tuition and fees and other charges. If my charges are not paid when due, I agree to pay NYIT all fees and costs associated with the collection of my delinquent account. In addition to payment of the principal amount due, the additional fees and costs may include collection agency fees constituting 33 to 50 percent of the principal amount due if NYIT engages a collection agency to collect payment; legal fees of 33.3% of the principal amount due if NYIT engages legal counsel to collect payment; any and all interest on the outstanding balance at the maximum legal rate allowed by law and; any and all other costs associated with collection of the amount due NYIT. I understand my obligation to pay some or all of these additional fees and costs associated with collection of my delinquent account.

Student's signature

Date MM/DD/YYYY

NEW YORK INSTITUTE OF TECHNOLOGY
Northern Boulevard, P.O. Box 8000, Old Westbury, NY 11568-8000

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