



ENGINEERS & SURVEYORS INSTITUTE

2020 EDUCATION PROGRAMS

4795 Meadow Wood Lane, Suite 115 East
Chantilly, VA 20151
703-263-2232
www.esinova.org



Table of Contents

Introduction to ESI Education Programs4
 Enrollment/Cancellation of Enrollment in ESI Classes..... 7
 Class Attendance Policy.....8
 Class Cancellation Fees.....8
 Class Assessments..... 8
 Make-Up Class Fees.....8

DPE Certification Program.....9
 Education Requirements to Establish DPE Status.....10
 Education Requirements to Maintain DPE Status.....11
 Attendance Requirements to Establish DPE-Eligibility.....11
 Assessment Requirements to Establish DPE-Eligibility.....11

General Class Catalog Information.....12
 Class Fee Schedule.....12
 Class Details: Class Descriptions/Dates/Location.....13

Academic Year 2020 Course Schedule.....14

Fundamental Education Program.....14

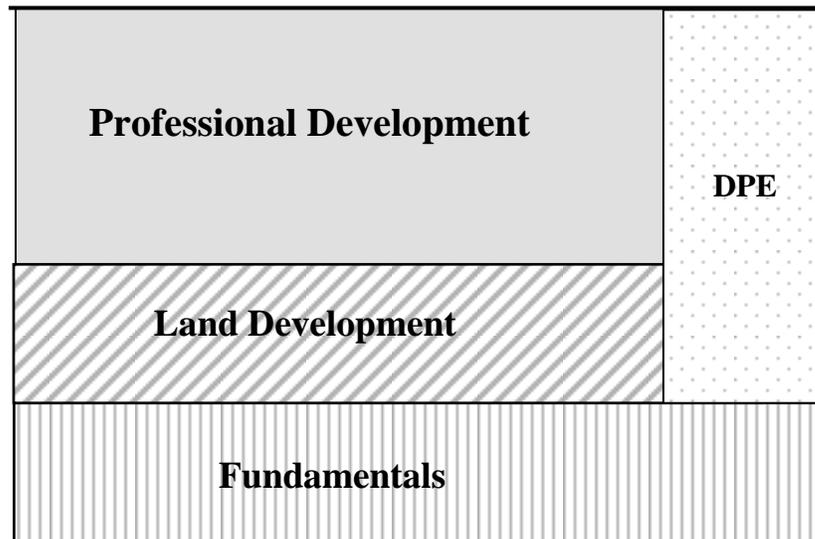
Land Development Engineering Program.....14
 LDE Semester 1.....15
 LDE Semester 2.....16
 LDE Jurisdictional Sequences.....17

Professional Development Program.....18
 General Education Classes (PD Electives).....18
 Jurisdictional Policy & Procedure Update Classes.....24
 Symposia & Seminars.....24
 Alternate Educational Opportunities.....25

INTRODUCTION TO ESI EDUCATION PROGRAMS

The continually changing demands of our industry require both public and private organizations to have employees with the skills and knowledge to respond to a variety of needs—often on short notice. To help these organizations stay abreast of these diverse educational demands, ESI has structured educational programs tailored for practicing professionals of all skill levels and technical disciplines.

ESI education programs use the **Knowledge for All Levels** approach, the organization of which is depicted in the figure below:



Put simply, our programs offer education opportunities for professionals throughout their lifetime of practice, from Fundamentals through Professional Development to Symposia and Seminars on “hot topics” as they arise.

Copyright © 2020 Engineers and Surveyors Institute

Which courses should I take?

FUNDAMENTAL EDUCATION PROGRAM

Land development professionals who have little experience working in Northern Virginia (or those who *work with* land development professionals) should explore the Fundamental Education Program. The two-day course, **Fundamentals of Land Development in Northern Virginia**, is tailored to individuals who have the technical knowledge base associated with an undergraduate degree, minimal practical experience, or a lack of familiarity with the policies and practices of Northern Virginia's jurisdictions. (See page 14 for more information on this course.)

LAND DEVELOPMENT ENGINEERING (LDE) PROGRAM

Land development professionals looking for a more comprehensive approach should consider the two-semester **Land Development Engineering (LDE) Program**. These classes provide a basic level of understanding of land development engineering associated with land development plan design and review. Successful completion of these two semesters, plus the one-day **LDE Jurisdictional Sequence** for each jurisdiction in which one intends to become certified, is required before applying to obtain the **Designated Plans Examiner (DPE) Certification** (detailed information regarding the DPE Certification Program begins on page 9). (See pages 14-17 for more information on the LDE Program.)

Note: Those interested in specific aspects of land development may enroll in **individual classes** (piecemeal sequence) or an entire semester in the Land Development Engineering Program. Contact ESI for details.

PROFESSIONAL DEVELOPMENT (PD) PROGRAM

Experienced land development professionals should consider the Professional Development Program. These classes, with annually changing topics requested by our members, provide information of a more advanced and detailed nature about the most relevant subjects within the land development and surveying professions. They address general and jurisdictional issues that directly relate to the practical application of the various professional skills associated with the industry. (Information on current PD offerings begins on page 18.)

GENERAL EDUCATION CLASSES (PD ELECTIVES) include various technical engineering, plan design, and surveying subjects that are of interest to the ESI membership. Some of these classes are specific to the local jurisdictions of Northern Virginia.

JURISDICTIONAL POLICY & PROCEDURE (P&P) UPDATE CLASSES address changes to the plan design and review policies, regulations, ordinances and procedures which have occurred over the last year in local jurisdictions, as well as common errors and misconceptions which impede plan approval in those jurisdictions.

SYMPOSIA & SEMINARS are offered as needed to quickly provide the latest information or techniques on key technologies, processes, and practices in land development design. These concentrated, fast-paced programs afford members a comprehensive conduit to the latest techniques and requirements surfacing in the land development arena.

ALTERNATE EDUCATIONAL OPPORTUNITIES provide additional options to members for receiving credit for General Education Classes (PD Electives). These opportunities require ESI approval, as indicated, for authorization to obtain credit as a PD Elective.

Note: ESI classes meet standards set forth in the Commonwealth of Virginia (and other states) to comply with continuing education requirements for professional licensing renewal or reinstatement. Professionals always have the responsibility to determine the relevance of any class to their areas of practice.

ENROLLMENT/CANCELLATION OF ENROLLMENT IN ESI CLASSES

Enrollment Instructions:

1. Go to <http://lms.esinova.org>.
2. In the top right corner, click Register.
3. Fill in information and click Create my new account.
4. Check your email for the confirmation link. Click the link, then click Continue in the window that opens.
5. On the left side, under Dashboard, click Courses.
6. Click the year.
7. Click the class category.
8. Click the class in which you wish to enroll.
9. Click the green Enroll Me button.

You will receive an email confirming your enrollment.

To Cancel Enrollment:

1. Go to <http://lms.esinova.org>.
2. On the left side, under Dashboard, click My courses.
3. Click class from which you wish to unenroll.
4. Under Administration, click “Unenroll me from (class number & name).”
5. To confirm, click Continue or Cancel.

Class Attendance Policy

Under its charter with the Commonwealth of Virginia to provide quality educational programs, it is important that ESI verify attendance of individuals at all classes. This requires maintaining an auditable system of attendance validation. ESI uses sign-in and sign-out rosters at the beginning and end of classes to accomplish this. Consequently, those enrolled in a class are requested to avoid conflicts which may require them to arrive late or leave early.

Class Cancellation Fees

Individuals who must miss a class are requested to cancel their enrollment **at least one business day in advance of the class** (see instructions for cancelling on page 7.) Those who fail to do so may be **charged a \$75 administrative fee** to help defray the resulting cost of additional time and effort incurred by staff.

Class Assessments

Assessments are important activities administered during ESI classes to determine the student's success in understanding the main points of the presentation and achieving its learning objectives. These assessments may be comprised of, although are not limited to, quizzes, practical exercises, group work, presentations, and exams.

Make-Up Class Fees

A \$75 administrative fee may be charged per Make-Up Class to fulfill annual education requirements for maintaining DPE status. This fee helps defray the additional time and expense incurred by staff to produce Make-Up Classes.

DPE CERTIFICATION PROGRAM

The Engineers and Surveyors Institute (ESI) operates under a Commonwealth of Virginia charter to promote the production of quality engineering plans and the expedited plan review process in jurisdictions throughout Virginia. Key to this process is the role of the Designated Plans Examiner (DPE).

DPE Certification

The **Designated Plans Examiner** certification verifies that the holder is competent in the design, preparation, and submission of land development plans, thus allowing participation in an expedited process not available to non-certified practitioners.

From the *education* perspective, there are two categories of DPE status.

1. **DPE-Eligible**: An individual who has completed the initial education requirement, but who has not yet applied for and/or been approved as a DPE, is considered “**DPE-eligible**.”
2. **DPE-Certified**: An individual who has completed the initial education requirement and all other applicable prerequisites, and has applied for, been approved, and has received a DPE number, is considered “**DPE-certified**” and is simply referred to as a DPE.

Before applying to obtain the Designated Plans Examiner (DPE) certification, professionals must meet the following criteria:

- Possess a **BS degree in Civil Engineering** (or a related field) or six years of experience in plan design or review.
- Successfully complete the **Land Development Engineering Program**, which includes **Semesters 1 & 2** and the appropriate **Jurisdictional Sequence(s)**.
- Perform the specified number of hours of **Peer Review** in the appropriate jurisdiction(s).
- Accrue two years of **plan design or review experience** in the appropriate jurisdiction(s)—which meets the approval of the appropriate APE Board(s). (This is in addition to the six years required in lieu of a degree in Civil Engineering or a related field.)

Education Requirements to Establish DPE Status (Eligibility)

Each member who wishes to become DPE-eligible, and subsequently, DPE-certified, must satisfy an initial education requirement. (After DPE status has been established, an annual education requirement must be fulfilled in order to maintain it.)

Initial (one-time requirement) to Establish DPE-Eligibility:

Successfully complete the Land Development Engineering (LDE) Program

- **LDE Semester 1 & Semester 2:** These semesters provide the information necessary for certification as a Designated Plans Examiner (DPE). They consist of engineering, planning, and design classes that prepare the student to perform those tasks necessary to successfully design, prepare, and submit land development plans. (An individual who takes a class or semester by itself may not receive credit toward DPE-eligibility.)
- **LDE Jurisdictional Sequence(s):** This one-day session provides the student with all relevant jurisdictional material and lessons learned for *each* jurisdiction in which the member intends to seek certification.

Note: Please contact ESI to determine if all applicable prerequisites have been met prior to applying for DPE certification. After professionals meet all necessary requirements in the desired jurisdiction, they may apply for certification. The jurisdiction will review each application and award the Designated Plans Examiner status to those qualified.

Annual Education Requirements to Maintain DPE Status (Eligibility/Certification) become effective in January of the year after successful completion of the LDE Program.

Education Requirements to Maintain DPE Status (Eligibility/Certification)

- Successfully complete three **General Education Classes (PD Electives)** from the **Professional Development Program** in subjects relevant to the plan design, preparation, and submission process or surveying.
- Successfully complete the annual **Jurisdictional Policy & Procedure Update Class** for *each* jurisdiction in which the member is eligible/certified.
- Perform the specified number of sessions of **peer review** for *each* jurisdiction in which the member is eligible/certified.

Attendance Requirements to Establish DPE-Eligibility

Those who enroll in the **Land Development Engineering Program** to satisfy initial DPE education requirements *may not miss more than one class per semester and must attend all classes in the appropriate Jurisdictional Sequence(s) to receive credit* for the program. Any additional missed classes must be made up, which may not be possible until the following year.

Semester 1 of the program is scheduled from February through May, and **Semester 2** is scheduled from September through November. Although either semester may be taken first, the two-semester format is offered as a complete program, and all seeking to establish DPE-eligibility should enroll in both semesters. Each **Jurisdictional Sequence** of this program will occur in a one-day course after Semester 2 (in December). Dates and times will be announced for each jurisdiction during Semester 2.

Assessment Requirements to Establish DPE-Eligibility

Those enrolled in the **Land Development Engineering Program** are administered assessments throughout the program. These include class quizzes, practical exercises, and group work. A student who fails to satisfactorily demonstrate understanding of the main points and achievement of the learning objectives of a class, as assessed by the instructor, may be required to repeat that class. A final exam is given at the end of each semester. Students must pass both final exams to successfully complete this program.

GENERAL CLASS CATALOG INFORMATION

CLASS FEE SCHEDULE

<u>Program</u>	<u>Members</u>	<u>Nonmembers</u>
Fundamental Education Program Fundamentals of Land Development in Northern Virginia	\$870	\$1,500
Land Development Engineering Program (For credit toward DPE-eligibility)		
Semester 1	\$1,560	\$3,000
Semester 2	\$1,560	\$3,000
Jurisdictional Sequences (per County)	<u>\$ 840</u>	<u>\$1,500</u>
Total Course Fee	\$3,960	\$7,500
Land Development Engineering Program Classes		
Piecemeal Classes* (per class)	\$240	\$500

*May be taken for informational purposes but may not be applied toward DPE or DPE-eligible status.

Professional Development Program

All Classes**	\$240	\$500
Symposium	\$180	\$350

**Member organizations earning non-DPE educational credits may use their credits for these classes. For details, please contact ESI.

Note: If interested in individual or organizational membership, please contact ESI.

CLASS DETAILS

Class Descriptions: The descriptions of classes in this catalog are general representations of the content and level of the material that is intended for presentation. The exact information addressed is a function of each instructor's expertise and determination as to the best way to adequately cover material relevant to the topic of the class. The majority of ESI classes comprise lecture, interactive group activities, practical exercises, and assessments. As part of quality assurance, video monitoring devices may be used during instruction and activities.

Class Dates: The dates published for classes are the projected dates that the courses are scheduled to occur. Various circumstances beyond the control of ESI occasionally necessitate that a class be rescheduled or cancelled. In the rare instance that either is required, staff will alert those enrolled as early as possible.

Class Location: All classes will be held in the **ESI classroom, located at 4795 Meadow Wood Lane, Suite 115 East, Chantilly, VA 20151**, unless noted otherwise.

ACADEMIC YEAR 2020 COURSE SCHEDULE

FUNDAMENTAL EDUCATION PROGRAM

Fundamentals of Land Development in Northern Virginia

This two-day course helps practitioners new to the Northern Virginia area understand the practical side of the land development process as it occurs in one of the busiest regions in the state. This orientation course will give professionals the basic information they need to quickly become productive employees in a practical application environment.

Some topics to be covered: Overview of Plan Review Process in Fairfax & Loudoun Counties (including County Codes & Ordinances & Public Facilities Manual), **Wetlands & Environmental Quality Corridors (EQC), Sanitary Sewers & Septic Systems, & Plan Design Topics with Local & State Officials** (including Virginia Stormwater Management Program & VRRM Spreadsheet, Erosion & Sediment Control, Urban Forestry, Water Authority, Fire Regulations, & Transportation). *Enrollment includes all classes on both days.*

F101-20 Wednesday, October 7 (tentative) 9:00 am – 4:30 pm

F102-20 Thursday, October 8 (tentative) 9:00 am – 4:30 pm

LAND DEVELOPMENT ENGINEERING PROGRAM

This two-semester program, similar to a college course, is designed to provide students with a basic operating knowledge of the procedural and technical aspects for accomplishing plan approval in the Northern Virginia land development process. These classes address all practical aspects of land development, often including interactive exercises.

Note: Professionals must successfully complete both Semesters and the appropriate Jurisdictional Sequence(s) to establish DPE-eligibility. (Land Development Engineering classes do not qualify as PD Electives.)

Land Development Engineering – Semester 1 (L100 series)

L101-20	Introduction to the Process of Land Development Tuesday, February 4	3:30 – 6:30 pm
L102-20	Evolution of Land Development Tuesday, February 11	3:30 – 6:30 pm
L103-20	Roles & Responsibilities of Key Players Tuesday, February 18	3:30 – 6:30 pm
L104-20	Environmental Issues Tuesday, February 25	3:30 – 6:30 pm
L105-20	Survey Mapping & Subsurface Utility Engineering Tuesday, March 3	3:30 – 6:30 pm
L106-20	Comprehensive Planning & Zoning Cancelled	3:30 – 6:30 pm
L107-20	Geometric Site Layout I TBD	3:30 – 6:30 pm
L108-20	Geometric Site Layout II TBD	3:30 – 6:30 pm
L109-20	Street Design I Tuesday, June 2 (Online)	3:30 – 6:30 pm
L110-20	Street Design II Tuesday, June 9 (Online)	3:30 – 6:30 pm
L111-20	Grading & Earthwork Tuesday, June 16 (Online)	3:30 – 6:30 pm
L112-20	Tree Conservation Plan Preparation Tuesday, June 23 (Online)	3:30 – 6:30 pm
L113-20	Floodplain Studies Tuesday, May 5 (Online)	3:30 – 6:30 pm
L114-20	Drainage Outfalls Tuesday, May 12 (Online)	3:30 – 6:30 pm
L115-20	Semester 1 Exam Cancelled	3:30 – 6:30 pm

Land Development Engineering – Semester 2 (L200 series)

L201-20	Stormwater Planning Tuesday, September 8	3:30 – 6:30 pm
L202-20	Storm Drainage Design Tuesday, September 15	3:30 – 6:30 pm
L203-20	Stormwater Management—Quantity Tuesday, September 22	3:30 – 6:30 pm
L204-20	Stormwater Management—Quality Tuesday, September 29	3:30 – 6:30 pm
L205-20	Utilities—Wastewater Design Tuesday, October 6	3:30 – 6:30 pm
L206-20	Utilities—Water Distribution Tuesday, October 13	3:30 – 6:30 pm
L207-20	Erosion & Sediment Control Tuesday, October 20	3:30 – 6:30 pm
L208-20	Utilities—Dry Utilities Tuesday, October 27	3:30 – 6:30 pm
L209-20	Site Design Process: Steps & Procedures (Mandatory) Tuesday, November 3 (6-hour class)	12:30 – 6:30 pm
L210-20	Site Design Process: Steps & Procedures (Mandatory) Tuesday, November 10 (6-hour class)	12:30 – 6:30 pm
L211-20	Document Production—What & How Tuesday, November 17	3:30 – 6:30 pm
L212-20	Engineer’s/Surveyor’s Roles During Construction Tuesday, November 24	3:30 – 6:30 pm
L213-20	Final Exam Semester 2 Tuesday, December 1	3:30 – 6:30 pm

Land Development Engineering – Jurisdictional Sequences (L300 series)

Administrative Requirements for Plan Submission and Site Completion

Fairfax County Sequence (L310-20)

9:00 am--4:00 pm

This one-day course will be presented in the Herrity Building at the Fairfax County Government Center in Fairfax. December dates to be announced. (Required to establish DPE-eligibility in Fairfax County.)

L310-20 **LDS Introduction**
Planning Process
Zoning Ordinance
Site Plans/Subdivisions/Infill Lots
Peer Review
Customer & Technical Support Center
Stormwater Code & Regulations
Tree Conservation Ordinance
Expedited Review

Loudoun County Sequence (L320-20)

8:30 am--4:30 pm

This one-day course will be presented at the Loudoun County Government Center in Leesburg. December dates to be announced. (Required to establish DPE-eligibility in Loudoun County.)

L320-20 **Welcome to Loudoun County, Zoning**
Legislative Process
Subdivision Process
Site and Construction Plan Process
Bonding Process
Expedited Review

PROFESSIONAL DEVELOPMENT PROGRAM

GENERAL EDUCATION CLASSES (PD ELECTIVES)

P501-20 Communicating for Success

This interactive program will focus on ways to successfully navigate communication in the face of common, modern-day challenges. We will look at how understanding communication preferences, modes of communication and being more intentional can positively impact our results. Participants should bring a personal and relevant example of a recent communication challenge they have faced. Participants should also bring their cell phones so they can anonymously provide real time input to guide the discussions and create more personalization. A workbook and job aids will be distributed so that learning on the job can be applied from the classroom. Afterwards, participants will be able to identify and assess areas of communication that could use improvement, engage in communication with more intention to get more of the results they want, and recognize the best mode of communication to use to get the best results.

Thursday, January 23

3:30 – 6:30 pm

P502-20 Parking—Showing the Spaces

Topics planned for inclusion: Overview of parking, parking dynamics, Fairfax County parking requirements, parking alternatives, current approaches to parking management, and the future of parking.

Thursday, January 30

3:30 – 6:30 pm

P503-20 Smart Buildings/Smart Communities in Virginia

State by the internationally known Smart Cities Council. This session will cover what it means to be a Smart Community in Virginia, what the Commonwealth is doing to maintain its position as the first Smart State, and how that is reflected in specific building designs and overall community design. Specific topics to be covered include the Virginia State Action Plan for Smart Communities, examples of Smart Community projects in Virginia, smart buildings and public safety, the role of data, and other infrastructure components (power, roads, etc.). This interactive session will be led by Mr. David Ihrie, who heads the Smart Community initiatives for the Commonwealth.

Thursday, February 6

3:30 – 6:30 pm

P504-20 Development Project Financing

Topics planned for inclusion: Discussion on how value is determined; expected rates of return; cap rates; developer risk profiles and time value of money; single period financial analysis; investment analysis; real estate capital markets (debt & equity, capital stack); lender underwriting (DSCR, LTV/LTC); real estate finance process (predevelopment, short term construction financing, interim financing, permanent financing).

Thursday, February 13

3:30 – 6:30 pm

P505-20 Remote Sensing Yesterday and Today

A look at how remote sensing technology has developed over the years, from early imagery to today's drones and what possibilities the future holds. This class will address how computer advancements and software have changed mapping and the accuracies that can be achieved. Students will also learn the best uses of several technologies and how the data can be validated.

Thursday, February 20

3:30 – 6:30 pm

P506-20 Is My Submission Complete?

This class will have representatives from Fairfax Co., Loudoun Co., Town of Leesburg and ESI to cover various components required to accompany a complete submission to these entities and jurisdictions. Topics include what plan types require an ESI submission for each jurisdiction, what items are required for an ESI submission in each jurisdiction, what items are required for initial and subsequent submissions to each jurisdiction, and Top 5 deficient elements for submissions to each entity.

Thursday, February 27

3:30 – 6:30 pm

P507-20 Constructability Review

Topics planned for inclusion: Soil conditions, utility depths, benching, utility conflicts, wall construction, earthwork, and safety.

Thursday, March 5

3:30 – 6:30 pm

P508-20 2022 and You: A Surveyor's Perspective on Implementation

In 2022 National Geodetic Survey launches a new National Spatial Reference System. There will be new state plane coordinates and a new unit of measure. How will the transition and information transformation happen in practice? How

will surveyors adapt to the changes coming with the new datum? What will surveyors do to work with time dependent positioning? What are the practical changes that must take place for us to be 2022 ready? How will we know we are ready? Join us for a discussion of change management and practical concerns for implementing a new datum.

Thursday, March 12

3:30 – 6:30 pm

P509-20 Geology of the Washington DC Region—An Engineering Perspective

Topics planned for inclusion: Discussion on general geology, general distribution of geologic units in the region, recent deposits, brief engineering case studies, geologic hazards within the four geologic areas of the state, as well as Karst and seismicity.

Thursday, May 21 (online only)

3:30 – 6:30 pm

P510-20 Time Management for Frantic Professionals

By the end of this class, students will be able to:

- Apply best practices of time management theories, so that they can personally tailor their self-management work habits and activities.
- Identify major time wasters and develop control strategies to reduce or eliminate them.
- Distinguish between “important and urgent,” in order to focus on important work and strategic goals.
- Use effective planning and scheduling tools to prioritize and manage multiple projects/tasks.
- Learn effective time management team-building strategies that will increase collaboration and individual/group productivity.

Cancelled

P511-20 Green Buildings and Developers: How to ‘Plant’ the Idea and Why It Is Not Really that Hard!

What is the terminology for green roofs, green walls, and what about blue roofs or garden roofs (and what in the world is a purple roof) if they are all supposed to be green! Traditional elements such as retention ponds, storm water retention tanks are well understood, but there are new developments. Can rain gardens truly assist and how big do they have to be? Is putting a farm on a roof viable? And then there

is solar, a great way to go green. But studies show that roof systems can make the temperature of the panels increase, making them less efficient. And now there is a drive for the use of locally native plants, habitats for birds and insects on roofs and other planted areas. The presentation will explore these issues with examples of projects and evolving technology creating solutions not just for the future but right now, as well as to help coordinate the actions of the design team as soon as possible.

Thursday, September 3

3:30 – 6:30 pm

P512-20 Pump Station Design

This class will provide an overview of the types of pumps, applications, design consideration for pump selection and operation of pumping stations used in the water and wastewater industry. There are many considerations in selecting pumps and designing a pumping station that operates efficiently and effectively. This class will cover the key considerations for designers. It will also review how pumps are constructed and identify some of operational problems that occur and how to address these issues in design.

Thursday, September 10

3:30 – 6:30 pm

P513-20 CFC Headquarters Site Visit

This site and facility tour will include the various site designs and approvals to implement construction of this LEED Gold-certified, state-of-the-art National Rural Utilities Cooperative Finance Corporation in Dulles, Virginia. The presentation will also include aspects of the site access, utilities and stormwater management.

Thursday, September 17

3:30 – 6:30 pm

P514-20 Promoting Comprehensive Planning & Affordable Housing in Virginia

Participants in this class will gain a deeper understanding of strategies to promote and implement effective comprehensive planning in Virginia. The class will begin with an overview of comprehensive planning and the strong interconnectedness between land use, transportation, and public utilities. The class will then discuss smart growth and the benefits of increased density. Effective plan implementation tools such as zoning and subdivision regulations will be presented. The need to build affordable housing in Virginia and public options to encourage its development will be discussed. Participants will also have the opportunity to

engage in discussion with their classmates by considering and evaluating scenarios related to affordable housing and smart growth.

Thursday, September 24

3:30 – 6:30 pm

P515-20 Potomac Water Supply Program: Loudoun Water's Response to Future Water Demands

This course will provide an overview of the multiple phases of a large water infrastructure project, including conceptual design, permitting, detail design, and construction. The class will also include a tour of the new Trap Rock Water Treatment Facility. The class and tour will be held at: Trap Rock Water Treatment Facility Administration Building, 42400 Clearwater Glenn Circle, Leesburg, VA.

TBD

3:30 – 6:30 pm

P516-20 Show Me the Money: Funding Sources for Large Partnership Projects

Using the case study of Reston Station, this class will cover how funding/financing for large construction projects occurs. Taught by finance practitioners from both the public and private sectors, this course will explain sources of funding, what the biggest constraints are, and how those were blended in a unique public-private partnership project in Fairfax. Topics planned for inclusion: explanation of P3 and joint-venture projects; standard approaches to public capital project financing, standard approaches to private mixed-use development financing, life cycle of large construction project financing, and how those are blended in public-private partnership projects.

Thursday, May 14 (online only)

3:30 – 6:30 pm

P517-20 Locally Administered Programs (LAP): What You Need to Know

Topics for class inclusion: What are LAP projects and processes, funding possibilities and working through the LAP process.

Thursday, June 4 (online only)

3:30 – 6:30 pm

P518-20 Alternative Energy Developments (Introductory)

Students will become familiar with alternative energy designs based on examples in the region, including solar, wind, energy storage, and microgrid and/or district energy types. The class will also describe concepts like distribution and transmission sides of the electric grid, retail and wholesale electric prices, etc. It

will also summarize rules and regulations that govern projects' operation and implementation at the state, local and interstate level. The presentation will update students about any state law changes concerning alternative energy.

Thursday, May 28 (online only)

3:30 – 6:30 pm

P519-20 Focus Group Workshop

This critical four-hour workshop helps develop ESI's Professional Development curriculum for the next academic year. Under the direction of the Chair of the Education Committee, participants will consider classes suggested by ESI's membership and consolidate them into a prioritized list of courses, identifying class titles, topics to be covered, and subject matter experts. Participants are subject to approval of Director of Education, Education Committee, and/or Executive Director to ensure sufficient knowledge base of ESI curriculum and adequate representation from both the public and private sectors.

Wednesday, August 19 (tentative)
(includes lunch)

9:00 am – 1:00 pm

JURISDICTIONAL POLICY & PROCEDURE (P&P) UPDATE CLASSES

County Policy & Procedure (P&P) Update Classes (P600 series)

These classes feature local and state officials who will address the changes to plan design and review policies, regulations, ordinances, and procedures occurring during the past 12 months within their jurisdictions. They may also include information about the types of jurisdictional resources available, Internet links, common mistakes on plans, and unwritten policy practices. DPEs and DPE-eligibles are required to take the classes for all jurisdictions in which they maintain DPE status. These sessions are typically scheduled in the fall, and members will be notified by email when they are available for enrollment. (Instructions for enrollment in these classes will be attached.) (P&P Classes do not qualify for credit as PD Electives.)

P611-20 Fairfax County P&P Update Class

P621-20 Loudoun County P&P Update Class

P631-20 Prince William County P&P Update Class

SYMPOSIA & SEMINARS

ESI periodically offers seminars and symposia as rapidly developing opportunities for current technology or process information updates intended to provide responsive access to the membership. They are typically concentrated, fast-paced and information distribution oriented, affording members a comprehensive conduit to the latest techniques and requirements surfacing in the land development arena. Members will be notified by email when such classes are available. (As information distribution conduits, symposia or seminars may not qualify for credit as PD Electives.)

EDUCATIONAL OPPORTUNITIES (may qualify for credit as PD Electives if appropriate approval, as indicated, is granted).

Note: ESI's acceptance of any of the following "Alternate Educational Opportunities" as one of the three annually required PD Electives to maintain DPE status does not guarantee its approval as credit for continuing education in professional license renewal/reinstatement.

Guidelines for Acceptance of an Alternate Educational Activity (other than Class Attendance) for Credit as a PD Elective

(See **P900-20** for information on Participation in an Alternate Class)

- Members may (with appropriate ESI approval) receive continuing education credit for an elective under the Professional Development Program by participating in an educational activity (other than class attendance) that meets the following criteria:
 - Has a stated content area, purpose, and observable and measurable objectives
 - Provides for the maintenance, improvement, or expansion of professional skills and knowledge in land development
 - Has an established duration
- Members interested in participating in an alternate activity for PD Elective credit should contact the Director of Education for further information before participating.

- Any alternate educational opportunity tentatively approved for credit as a PD Elective will require the member to submit evidence of successful completion of the activity to the Director of Education before final approval is granted.

P800-20 Participation in a Technical or Process Study

Members may perform study research and coordination regarding a topic identified by the Executive Director. The study shall include a study plan that identifies a statement of objectives, a desired result product, and a work schedule. The study shall have a final report identifying the work process and study results. The member shall provide the format outline for the proposed study to the Executive Director no later than 30 days after enrolling in this class.

P801-20 Participation in a Jurisdiction Support Study

Members participating in support efforts for jurisdictions, as identified by the Executive Director, may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Executive Director.

P802-20 ESI Executive Committee

Members of the Executive Committee may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Executive Director.

P803-20 Technical Issues Study – Leesburg

Members of the Technical Issues Study -- Leesburg Committee may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Executive Director.

P804-20 Education Review Committee

Members of the Education Review Committee may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Director of Education.

P805-20 Advisory Plans Examiner Board (APEB)

Members of the Advisory Plans Examiner Board may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Executive Director.

P810-20 Engineering Standards Review Committee (ESRC)

Members of the Engineering Standards Review Committee may enroll in this class. Credit is contingent on meeting product and attendance requirements identified by the Executive Director.

P900-20 Participation in an Alternate Class

If a member seeks approval to use participation in an alternate class as credit for one of the three annually required electives to maintain DPE status, the member shall provide the following to the Director of Education, who may refer it to the Education Committee for review:

1. Evidence that the class is from an accredited academic institution or an institution that is state or federally certified as a continuing education credit provider/sponsor.
2. The course description and learning objectives of the alternative class, which shall address a topic comparable to one addressed by ESI classes.
3. If the course is tentatively approved as an acceptable alternate class, the member will also provide evidence of successful completion of the course to the Director of Education before final approval to receive credit is granted.

P910-20 ESI Instruction (ESI Instructors Only)

An ESI instructor who teaches a block of instruction in any of the ESI Education Programs in the current year may enroll in this class. Instructors may enroll in P910 only once per year. Approval by the Director of Education is required.

P920-20 ESI Curriculum Development (ESI Instructors Only)

An ESI instructor who develops a new block of instruction, or substantially updates one, in any of the ESI Education Programs in the current year may enroll in this class. Instructors may enroll in P920 only once per year. Approval by the Director of Education is required.

