



COMMONWEALTH OF

VIRGINIA

ENGINEERING (FE/PE) AND SURVEYING (FS/PS/VIRGINIA STATE SPECIFIC/LSB/MAPPING SCIENCES PHOTOGRAMMETRY) EXAMINATIONS

FIRST-TIME APPLICANTS and REPEAT CANDIDATES

CANDIDATE INFORMATION BULLETIN

EXAMINATION DATES

PE/PS/VA STATE:	April 16, 2010	October 29, 2010
FE/FS:	April 17, 2010	October 30, 2010
LSB:	April 17, 2010	(Spring Only)
Mapping Science:	April 16, 2010	(Spring Only)
Photogrammetry		
VA State Specific:	April 16, 2010	(Spring Only)

EES must receive the completed scheduling forms from first-time applicants and registrations from repeat applicants by the following deadline dates:

April Deadline: March 17, 2010
October Deadline: September 17, 2010

CALCULATORS - Only the models listed on NCEES web site may be used during the examination. Please visit the NCEES web site, www.ncees.org, for the most up-to-date information.

INTRODUCTION

The Virginia Department of Professional and Occupational Regulation (DPOR), Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) is responsible for licensing and regulating the profession. The Board through DPOR has contracted with Engineering Examination Services (EES), a division of Professional Credential Services, Inc. (PCS) to provide various testing services. Please read the following information carefully before completing the enclosed application form. All inquiries regarding the examination must be directed to the Virginia Engineering Coordinator at Engineering Examination Services (EES).

For questions concerning examination administration, please contact:

EES
 VA ENG/LS
 PO Box 198689
 Nashville, TN 37219-8689
 (Toll-free) 877.ENG.EXAM (877.364.3926)
 Fax: 615.880.4282
 E-mail: vaeng@pcshq.com
 Web: www.pcshq.com

The Board through DPOR requires an application for licensure or regulatory status, as well as the use of a variety of other forms for Board review and approval. Applicants may download this information at: www.dpor.virginia.gov.

Please follow the procedures as outlined or contact the Board office for the necessary forms, questions concerning the application, or eligibility process.

DPOR
 Perimeter Center, Suite 400
 9960 Mayland Drive
 Richmond, VA 23233
 Licensing Section: 804.367.8512 or 804.367.8506
 Fax: 804.527.4294
apelscidla@dpor.virginia.gov

FIRST-TIME APPLICANTS

A first-time applicant is:

- anyone who has never been approved before by the Commonwealth of Virginia for the examination type desired; or
- an applicant whose eligibility has expired for the desired examination type.

Please contact DPOR if you have questions regarding your eligibility status.

FIRST-TIME APPLICANT PROCESS

1. Obtain Information Sheet and Application Form downloaded from DPOR web site.
2. Complete Application Form with other requirements as noted on the Information Sheet and forward to the DPOR office.
3. DPOR reviews applications and determines examination eligibility. DPOR mails approved applicants an Approval Letter along with an Examination Scheduling Form.
4. Approved applicants complete the scheduling form and submit it directly to EES along with the examination fee before the deadline. Only applicants who have been approved to take the examination by the DPOR should complete an examination scheduling form. Applicants are advised (not required) to use certified mail "return receipt request" to confirm EES has received their scheduling form.
5. Approved applicants who have submitted a scheduling form and examination fee will receive an admission ticket from EES approximately two weeks prior to the test date. Please call EES if you have not received your admission ticket one week prior to the examination.

REPEAT CANDIDATE PROCESS

1. Repeat candidates may schedule over the telephone or the internet, www.pcshq.com, during the registration period. The registration period for the October examination is August 1 through September 17, and the April examination is February 1 through March 17. Candidates scheduling for the examination over the internet will receive an email confirmation within 48 hours. All repeat Candidates who have scheduled for the examination will receive a confirmation/receipt through the U.S Postal Service. Candidates may choose to be invoiced and must submit their invoice and payment by the examination scheduling deadline to be registered for the examination.
2. Repeat candidates who are registered will receive an admission ticket from EES approximately two weeks prior to the examination date. Please call EES if you have not received your admission ticket one week prior to the examination.

ENGINEERING AND SURVEYING EXAMINATION FEES

Payment must be by certified check, company check, or U.S. money order (NO personal checks) made payable to Engineering Examination Services or by Visa or MasterCard. The applicant's name should be posted on the payment document.

EXAMINATION FEES

FE	\$145
PE	\$255
STRUCTURAL II	\$745
FS	\$190
PS	\$255
VA State Specific Examination	\$165
LSB (April only)	\$315
Mapping Sciences (April Only)	\$ 55
Photogrammetry VA State Specific	\$ 55

WITHDRAWAL AND POSTPONEMENT POLICY

Candidates may request either a withdrawal or a one-time postponement before the scheduling deadline. The request must be in writing and forwarded to the EES via postal service or email. Request after the deadline will only be approved if there is an extenuating circumstance and proper documentation is provided such as military orders, illness, death in the family, etc. Extenuating circumstances are NOT job requirements, vacations, lack of study time, weddings, etc.

Please note: It is when you submit your scheduling form or register via telephone or internet that you are considered scheduled for the examination with EES.

Only scheduled candidates can request a postponement or a withdrawal.

If a withdrawal is granted, the candidate will be notified and will be withdrawn from the examination. The candidate will also receive a refund less the \$50 non-refundable processing fee. Refunds are issued 45 days after the examination date. It will be the candidate's responsibility to reschedule for their selected examination date.

Candidates approved for a postponement, will be transferred to the next available examination; however, the eligibility will not be extended. Candidates will be responsible for paying the difference if fee increases occur.

It is the candidate's responsibility to contact EES prior to the test date if you have not received your admission documentation. EES has no control over the US Postal Service. If you do not appear for testing, and a withdrawal or postponement has not been granted, you will be considered absent and will forfeit your examination fee. Absentee candidates should contact EES for rescheduling instructions.

SPECIAL ACCOMMODATIONS

In accordance with the provisions of the Americans with Disabilities Act (ADA), examination administration modifications are available for candidates who qualify. Also, candidates who are members of religious faiths that cannot take the examination on an assigned date may qualify for special accommodations. Please go to the NCEES website (www.ncees.org) to read complete information as to the application procedures for special accommodations. Submit all requests and documentation to NCEES before their deadline.

Please note that the mailing addresses for the requests vary by the type of request you are making. The correct mailing address is on each specific report.

NAME OR ADDRESS CHANGES

Name and address changes must be submitted to both the VA DPOR office and EES in writing. In order to change your name and/or address with EES records you must show your old name and/or address and new name and/or address. Please include copies of any court documents if applicable (marriage or other legal name changes). Also include the name of the examination taken (profession) and examination date. Name or address changes may

be faxed to EES at 615.880.4282 or emailed to vaeng@pcshq.com and to the VA DPOR at 804.527.4294 or emailed to apelscidla@dpor.virginia.gov. It is advised that candidates with address or name changes report that change no later than three weeks prior to the examination in order to receive their admission documentation at their new address.

NOTIFICATION OF EXAMINATION ADMISSION

Approximately two weeks prior to the examination, an admission ticket will be mailed to eligible candidates and will include date, time, and location of the examination. Candidates determined to be ineligible for the examination will receive a partial refund of the scheduling fees approximately 45 days after the examination.

MECHANICAL PENCILS

Candidates must use the mechanical pencils provided by NCEES at the examination site.

TEST SITE AND REPORTING TIME

The exact test site location and reporting time will be provided in your admission documentation. A map to the site will be provided. It is also suggested that you visit a web site for driving directions from where you are in relation to the test site.

NCEES

Candidates are encouraged to visit the National Council of Examiners for Engineering and Surveying web site (www.ncees.org) for information regarding the examination content, scoring system, and the latest information regarding the calculator policy.

ENVIRONMENTAL DISTRACTERS

Although every attempt is made to provide a quiet and comfortable testing environment, noise and room temperatures may be an unforeseen distracter. It is suggested that if you are sensitive to noise or temperature variations, you may want to bring earplugs and types of dress that can help you to adapt to a cooler or warmer climate in the examination room. EES will work with the testing site staff to anticipate potential problems.

ADMISSION REQUIREMENTS

1. You must present your admission ticket and one form of **government issued identification with a photograph and your signature** (i.e. driver's license or passport) in order to be admitted to the examination room.
2. The identification must be **current and clearly recognizable** or you may not be admitted to examination. If your photo does not have a signature, you must bring a second form of signature identification. If you do not have proper identification, you will not be admitted into the examination room.
3. It is your responsibility to be at the examination on time. Candidates will not be permitted into the examination room after the announcements have begun. It is strongly suggested that you visit the site before the day of the examination so you are familiar with the route and the needed travel time.
4. In the event of inclement weather or a national disaster, please call the PCS toll-free number for updates.

PE / PS / Mapping Sciences CANDIDATES ONLY

You may use published books, codes, tables, standards and ordinances, and bound reference materials. Bound reference materials are defined as stitched, glued or fastened by spiral binders, plastic snap binders, brads or screws. Current regulations, available on the VA DPOR web site, will print as a single sheet format and immediately become an "unbound document". Please bind all reference materials as noted above.

Candidates may tab reference books before the examination with Post-it™ type notes and flags, but pads of Post-it™ notes and flags are not permitted in the examination room. Candidates are not permitted to exchange reference materials or aids during the examination. Candidates are not permitted to write and make notes in any of the reference materials.

All items brought to the test site will be the candidate's sole responsibility. EES, the Board or the facility are not responsible for any lost, misplaced, and/or stolen items.

ITEMS PROHIBITED IN EXAMINATION ROOM

Unapproved calculators are not permitted.

Devices or materials that might compromise the security or disrupt the examination process are not permitted.

Devices with copying, recording, or communication capabilities are not permitted. These include but are not limited to cameras; cell phones; desktop, hand-held, laptop, and palmtop computers; databanks; data collectors; organizers; pagers or beepers; PDAs; radios; headsets; tape players; MP3 players; portable fax machines; calculator watches; reproduction equipment; electronic dictionaries; electronic translators; transmitting devices; and recorders.

Personal writing and erasing instruments may not be used to complete any portion of the examination. Only NCEES-supplied pencils and erasers are permitted.

Loose paper, legal pads, writing tablets, and unbound notes are prohibited. All scratch work must be written in the exam book. Writing on any other paper including the *FE Supplied-Reference Handbook*, or removing pages from the examination book or *Handbook*, is strictly prohibited.

Weapons of any kind, tobacco products, alcoholic beverages, and personal chairs are not permitted.

If any prohibited item is found in a candidate's possession after the examination begins, or if a candidate is found to be using a writing instrument other than the NCEES-supplied pencil, the item will be confiscated, the candidate will be dismissed from the examination and his or her examination will not be scored, and no refund will be provided. All confiscated items will be forwarded to NCEES.

Score Notices

VA DPOR office will mail score notices to all examinees.

SECURITY GUIDELINES

The Commonwealth of Virginia copyrights all test state specific questions. Copying, reproducing or taking any action to reveal the contents of an examination in whole or in part is unlawful. Removal of an examination booklet, answer sheet or other confidential material supplied to you at the examination is prohibited.

Any irregularity such as an act of impersonation, creating a disturbance, giving or receiving unauthorized information or aid to other candidates, attempting to remove examination information by any means, or possession of unauthorized notes or equipment may be sufficient cause for you to leave the examination room. All such irregularities will generate a report to the Board.

Supplied at the examination will be the Examination Site Conduct Agreement Form, which you must complete. This provides for your agreement to the security guidelines discussed above.

No visitors, guests or children are permitted in the examination room.

EXAMINATION CONTENT FOR SURVEYORS - VA STATE SPECIFIC, LSB AND PHOTOGRAMMETRY

Virginia State Specific

Beginning with the October 2002 examination, the Virginia Surveyor license examination will be a one-part, multiple-choice examination.

The content outline is as follows:

1. Regulations
2. Virginia Statutes
3. Geomatics
4. Land Planning, Design and Drainage
5. Construction/Route Location Survey
6. Erosion and Sediment Control
7. Boundary Survey Law
8. Wetlands/Chesapeake Bay/Water Quality

9. Hydrographics

The examination will contain approximately 55 questions. The number of questions will vary depending on the allocated difficulty and time per question. The examination is comprised of approximately 50% on regulations and statutes and 50% on technical. Please be aware that regulation and statutes questions are contained in each of the content areas noted above. There will be a two-hour time limit.

Candidate comment forms will be available in the event you wish to comment on a particular exam question. Please request a form from the proctor at the completion of your testing session.

Scoring and Reporting

There is no penalty for guessing so it is to your advantage to guess if you are unsure of the correct response. A minimum scaled score of 70 must be obtained in order to achieve a passing score. Results are confidential and will be reported to the Board office. The Board office will notify you of your results.

Suggested References for VA State Specific

It is strongly recommended that all candidates download the current codes and regulations from the VA DPOR website at www.dpor.virginia.gov. However, please be aware that these will be unbound single sheets. All documents must be bound as discussed previously in the CIB.

Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects Regulations. This reference is available at www.dpor.virginia.gov.

Library of Virginia, Standards for Plats, <http://www.lva.lib.va.us/whatwedo/records/standard/137-6.HTM>

Code of Virginia as it pertains to the Practice of Surveying to include 28.2-1300, <http://leg1.state.va.us/000/src.htm>

Virginia Department of Transportation, www.virginiadot.org

Drainage Manual, April 2002

Road and Bridge Standards, March 2002

Survey Manual, 2002

Subdivision Street Requirements, 2005

Work Area Protection Manual, 2003

Road Design Manual, 2005

Erosion and Sediment Control & Stormwater Management Program Manual, 2004

Virginia Erosion & Sediment Handbook, www.dcr.state.va.us/sw/e&s.htm

Chesapeake Bay Preservation Act, Chesapeake Bay Local Assistance Manual, November 1992, www.dcr.virginia.gov

Chesapeake Bay Preservation Area Designation and Management Regulations 9 VAC10-20-10 et seq., www.dcr.virginia.gov

Virginia Council on the Environment: A General Guide to Environmental Regulations in Virginia

U.S. Clean Water Act, Section 404, <http://www.usace.army.mil/cw/cecwo/reg/sec404.htm>

Virginia Coordinate System, Chapter 17

US Army Corps of Engineers Hydrographic Survey Manual, EM 1110-2-1003, January 2001 (draft), www.usace.army.mil

U. S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1, www.usace.army.mil

U.S. Supreme Court: State of TN vs. Commonwealth of VA 190 U.S. 64 (1903), <http://laws.lp.findlaw.com/getcase/us/vol/190.html>

Virginia Wetlands Management Handbook, "Wetlands Guidelines" www.vims.edu/ccrm/wetlands/handbook

Clark on Surveying and Boundaries, June 1998, Robillard and Bouman

Route Surveying, Hickerson

Surveying, current edition, Francis H. Moffit/Harry Bouchard Bouchard

NOAA Tide Tables

National Geodetic Survey – Geodetic Mark Preservation

Surveyor B

The Surveyor B examination is an 8-hour multiple-choice examination with a morning and an afternoon session. There will be approximately 50 questions, which comprise both sessions. However, the number of actual test questions will vary.

An individual must be licensed as a Virginia surveyor in order to take this examination.

An overall scaled score of 70 must be achieved in order to pass the examination for licensure.

As noted above, the same policies and procedures pertain to this license. The examination is offered in April of each year.

The content outline is as follows:

1. Erosion Control
2. Storm Water
3. Incidental Plans/Profile
4. Land Planning and Design
5. Sanitary Sewer
6. Storm Sewer Design
7. Water Line Extensions
8. Federal/State/Local Standards

Suggested References for Surveyor B

It is strongly recommended that all candidates download the current codes and regulations from the VA DPOR web site at www.dpor.virginia.gov. However, please be aware that these will be unbound single sheets. All documents must be bound as discussed previously in this *Candidate Information Bulletin*.

Board for Architects, Professional Engineers, Surveyors, Certified Interior Designers and Landscape Architects Regulations. This reference is available at www.dpor.virginia.gov.

Virginia Department of Transportation, www.virginiadot.org

Drainage Manual, April 2002

Road and Bridge Standards, March 2002

Survey Manual, 2002

Minimum Standards of Entrances, 2003

Subdivision Street Requirements, 2005

Virginia Erosion & Sediment Handbook,

www.dcr.state.va.us/sw/e&s.htm

Code of Virginia as it pertains to the Practice of Surveying

www.leg1.state.va.us/000/src.htm

Virginia Department of Health Manual for Waterworks Regulations and the Practice for Waterworks Design, www.vdh.state.va.us
Sewage Collection and Treatment Regulations

Virginia Sewerage Regulations

References of your choice on Sanitary Sewer Design and the Practice of Surveying.

MAPPING SCIENCES

The Mapping Sciences examination is a 6-hour examination containing 100 questions. It is part of the NCEES Principles and Practice Examination.

Candidates must pass the Fundamentals of Surveying Examination prior to attempting this examination.

The content outline is as follows:

1. Statutes and Rules
2. Standards
3. Project Planning
4. Geodesy and Map Projections
5. Data Acquisition
6. Data Reduction and Analysis
7. Documentation and Map Presentation
8. Business Principles and Communication
9. Quality Assurance

Suggested References for the Mapping Sciences †

Elements of Photogrammetry with Applications in GIS, Wolf & Dewitt 3rd Edition

Remote Sensing and Image Interpretation, Lillesand & Kiefer 5th or 6th Edition

Digital Elevation Model Technologies and Applications: The DEM Users Manual 2nd Edition, Edited by David F. Maune, PhD, CP

Glossary of the Mapping Sciences

ASPRS Manual of Photogrammetry

Introduction to Modern Photogrammetry, Mikhail, Bethel, McGlone

Photogrammetry

The Photogrammetry Virginia State Specific examination is a 2-hour examination containing 50 multiple-choice questions.

The content outline is as follows:

1. Regulations
2. Statutes
3. Control Field Practices
4. Photogrammetric Mapping
5. Virginia Mapping Standards
6. Flood Plain Mapping
7. Geometrics

Suggested References for the Photogrammetry Examination

VA Title 54.1 – Professions and Occupations, Chapter 4: APELSCIDA with excerpts from Title 13.1; Chapter 3: Department of Professional Occupation and Regulation

Administrative Code of VA, Title 18 Professional and Occupational Licensing, Agency 10: Board of APELSCIDA

Administrative Code of VA Title 17: Libraries and Cultural Resources, Agency 15: Library of VA Standards for Plats

Administrative Code of VA Coordinate System 55-28:297; Title 55, Chapter 17

VDOT Survey Manual including Mapping Standards

Chesapeake Bay Preservation Area Designation and Management Regulations, 9 VAC10-20-10 et seq

Chesapeake Bay Preservation Act

Elements of Photogrammetry by Paul R. Wolf and Bon A. Dewitt. McGraw Hill 2002. ISBN: 0-07-292454-3.

Suggested Reference for Photogrammetry Exam, continued

Manual of Photogrammetry, 5th edition, ASPRS (American Society for Photogrammetry and Remote Sensing). Editor: J Chris McGlone, 2004. ISBN: 1-57083-071-1

Introduction to Modern Photogrammetry by Edward M. Mikhail, James. S. Bethel, J. Chris McGlone. John Wiley & Sons, Inc. ISBN: 04-471-30924-9

Digital Elevation Model Technologies and Applications: The DEM Users Manual. 2nd edition. Edited by David F. Maune, A Maune, ASPERS, 5410 Grosvenor Lane, Suite 201, Bethesda, MD 20814. ISBN: 1-57083-082-7.

Digital Elevation Model Technologies and Applications. David Maune.

Code of VA 28.1, 28.2, 54.1, 62.1.2

18VAC 10-20-et seq

State Code 33.1-184, 42.1-8

Geo World, January 2003, page 28.

VDOT Survey Manual, 2002 edition – this edition will change in upcoming months.

VDOT 2002 VA Work Area Protection Manual.

VDOT Location and Design Division Survey Manual, 2002.

CBPA 9VAC10-20-40

A First Text on Geographic Information Systems. Bolstad, P., 2002.

Model Virginia Map Accuracy Standards Section

www.ngs.noaa.gov NAD83 Readjustment, National Geodetic Survey or Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning Techniques by the FGCC, 5/11/88, revised 8/1/89.