ELECTRICAL ENGINEER
Exam No. 7040

WHEN TO APPLY: From: January 4, 2017 To: January 31, 2017
APPLICATION FEE: $82.00

If you choose to pay the application fee with a credit/debit/gift card, you will be charged a fee of 2.49% of the payment amount. This fee is nonrefundable.

YOU ARE RESPONSIBLE FOR READING THIS NOTICE IN ITS ENTIRETY BEFORE YOU SUBMIT YOUR APPLICATION.

WHAT THE JOB INVOLVES: This class of positions encompasses professional electrical engineering work of varying degrees of difficulty and responsibility. There are three Assignment Levels within this class of positions.

At Assignment Level I: Electrical Engineers, under general supervision, perform responsible supervisory work, or difficult and responsible work in electrical engineering. They perform the usual duties of a section engineer in charge of a major electrical engineering section or equivalent; plan, assign and review the work of subordinates, prepare progress reports, and may represent an agency, department head, or top-level engineering or architectural officer or employee in relations with City departments and agencies, contractors, damage claimants, consultants or their representatives, and the general public; engage in, or supervise the conducting of complex and important research, investigations, studies or examinations related to the engineering functions or activities of a department or agency; prepare, or supervise the preparation of, or examine and review, the electrical engineering portions or aspects of the basic design plan or significant or complex portions of the basic design plan; for major projects for the construction, remodeling, operation, maintenance, or repair of public works, structures, or installations, prepare designs, plans, contract and working drawings, contract specifications and other technical specifications; supervise the conducting of construction inspection operations with particular reference to electrical plant, machinery or apparatus, or the inspection or testing in a laboratory, manufacturer's plant, or on a job site of equipment or materials to be incorporated in public works, plants, or structures, or the inspection of premises in connection with the issuance of requisite and pertinent permits and compliance with the provisions of law, rule or regulation; participate in the supervision of the operation, maintenance and use of electrical plant, machinery or apparatus; when assigned in writing, may sign and seal engineering and other official documents. May operate a motor vehicle. All Electrical Engineers perform related work.

Some of the physical activities performed by Electrical Engineers and environmental conditions experienced are: walking to and from inspection sites and during the course of inspections; climbing and descending ladders or stairs to get to areas to be inspected; standing on scaffolds to inspect work; standing for an extended period of time; bending and stooping during inspections; working in confined areas; distinguishing colors; wearing protective equipment, such as hard hats; climbing over and around various objects; walking in areas that may be damp, dark, smoky or acrid; working outdoors in all kinds of weather.

Special Working Conditions: Electrical Engineers may be required to work shifts including nights, Saturdays, Sundays, and holidays.

THE SALARY: The current minimum salary is $63,074 per annum. This rate is subject to change. There are three assignment levels within this class of positions. Appointments will generally be made to Assignment Level I. After appointment, employees may be assigned to the higher assignment levels at the discretion of the agency.
HOW TO APPLY: If you believe you meet the requirements in the “How to Qualify” section, submit an application on the Online Application System (OASys) at www.nyc.gov/examsforjobs. Follow the onscreen application instructions for electronically submitting your application and payment, and completing any required information. A unique and valid email address is required to apply online. Several internet service providers, including but not limited to Google, Yahoo!, AOL, Outlook.com, and Mail.com offer free email addresses. All new OASys accounts require verification before a candidate can submit an application to ensure the accuracy of candidate information. Verification is instantaneous for most accounts, but some accounts may require up to 24 hours to be reviewed by a staff member and resolved. Email notification will be sent to those creating accounts that require additional documentation before they can be resolved. Please keep this information and the application period deadline in mind when creating your account. The following methods of payment are acceptable: major credit card, bank card associated with a bank account, or a prepaid debit card with a credit card logo which you may purchase online or at various retail outlets.

If you are receiving or participating in certain forms of public assistance/benefits/programs, or are a veteran, you may qualify to have the application fee waived. For more information on eligibility for a fee waiver and documentation requirements, visit the Fee Waiver FAQ on the Online Application System at https://a856-eeexams.nyc.gov/OLEE/oasys/FAQFeeWaiver.aspx.

You may come to the DCAS Computer-based Testing & Applications Centers to apply for this examination online and submit a money order payable to DCAS (Exams) or to submit documentation for a fee waiver. The centers will be open Monday through Saturday from 9:00 AM to 5:00 PM:

**Manhattan**
- 2 Lafayette Street
- 17th Floor
- New York, NY 10007

**Brooklyn**
- 210 Joralemon Street
- 4th Floor
- Brooklyn, NY 11201

The DCAS Computer-based Testing & Applications Centers will be closed on Monday, January 16, 2017.

You must complete the entire examination by midnight, Eastern Time, of the last day of the application period (January 31, 2017). If you have questions about applying for this examination, you may contact DCAS at OASys@dcas.nyc.gov.

Special Circumstances Guide: This guide is located on the DCAS website at www.nyc.gov/html/dcas/downloads/pdf/misc/pdf_c_special_circumstances_guide.pdf and available at the DCAS Computer-based Testing & Applications Centers. This guide gives important information about claiming Veterans’ or Legacy credit, and notifying DCAS of a change in your mailing address. Follow all instructions on the Special Circumstances Guide that pertain to you when you complete your “Application for Examination.”

HOW TO QUALIFY: This is a computer-based Education and Experience Test. Your license, education, and experience will be evaluated online and you will receive immediate tentative results. You are responsible for determining whether or not you meet the qualification requirements for this examination prior to submitting your application. If you are marked “Not Qualified,” your application fee will not be refunded and you will not receive a score.

License, Education, and Experience Requirements: By the last day of the Application Period (January 31, 2017) you must have:

A valid New York State Professional Engineer’s License and either:

1. A master’s degree in electrical engineering from an accredited college or university and three (3) years of full-time, satisfactory experience in electrical engineering work; or
2. Four (4) years of full-time, satisfactory experience in electrical engineering work.

Current New York State registration as a Professional Engineer must be maintained for the duration of your employment.

The college or university must be accredited by regional, national, professional, or specialized agencies recognized as accrediting bodies by the U.S. Secretary of Education and by the Council for Higher Education Accreditation (CHEA).

If you were educated outside the United States, you must have your foreign education evaluated to determine its equivalence to education obtained in the United States. This is required only if you need credit for your foreign education in this examination.

Note: When you are completing your examination, in the box labeled Original Date of Issue, enter the date you originally received your New York State Professional Engineer’s License. (See item #3C in the Special Insert: Guide for Completing the Online Examination for detailed instructions on how to complete the Licenses, Certificates and/or Registrations section.)

You must clearly specify in detail all of your relevant licenses, education, and experience on your Online Education and Experience Test. You have until midnight Eastern time on the last day of the Application Period (January 31, 2017) to complete and submit your Online Education and Experience Test by clicking on the “Final Submit” button or it will be automatically submitted after midnight on the last day of the Application Period (January 31, 2017). Once your Online Education and Experience Test is final submitted, it will be rated based on the information you provided and saved. If you are currently employed by the City of New York, be sure to include information about your current job. If you have applied for a previous examination, do not assume information you provided on a previous Education and Experience Test will be saved. If you are found “Not Qualified,” you will not be able to submit new or additional information about your license, education, and/or experience online.
In order to receive credit for satisfactory experience performing electrical engineering work, for each employment you must have performed at least four (4) of the tasks listed in the Electrical Engineer Task Inventory. (For more information, see Item #3B in the Special Insert: Guide for Completing the Online Examination at the end of this document).

### Electrical Engineer Task Inventory

<table>
<thead>
<tr>
<th>Task Category #</th>
<th>Task Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0300.0000</td>
<td>Performs or supervises staff conducting electrical engineering work (14 Tasks).</td>
</tr>
<tr>
<td>0300.0001</td>
<td>Engages in or supervises the conducting of research, investigations, studies or examinations related to electrical processes.</td>
</tr>
<tr>
<td>0300.0002</td>
<td>Prepares or supervises the preparation of, or examines and reviews, plans, proposals, designs, contract and working drawings, contract specifications and other technical specifications, and estimates of quantities for major electrical engineering projects and programs.</td>
</tr>
<tr>
<td>0300.0003</td>
<td>Participates in or supervises major inspection operations by observing, checking and certifying the installation of materials or equipment, and by attesting to the performance and the results of tests of materials and equipment in a laboratory, manufacturer’s plant or on a job site.</td>
</tr>
<tr>
<td>0300.0004</td>
<td>Participates in or supervises the inspection of premises in connection with the enforcement of federal, state, or local laws and regulations relating to the storage, sale, manufacture, use or transportation of electrical equipment and appurtenances.</td>
</tr>
<tr>
<td>0300.0005</td>
<td>Participates in or supervises the operation, construction and maintenance of electrical engineering or manufacturing projects and the preparation of recommendations for alterations or repairs.</td>
</tr>
<tr>
<td>0300.0006</td>
<td>Develops safety procedures to be employed by workers operating equipment or working in close proximity to on-going electrical systems.</td>
</tr>
<tr>
<td>0300.0007</td>
<td>Examines and oversees the work of electricians troubleshooting problems with electrical engineering or manufacturing processes to determine the most effective arrangement of operations, including but not limited to switches, controls and surveillance.</td>
</tr>
<tr>
<td>0300.0008</td>
<td>Performs tests and/or monitors performance of processes throughout stages of production to determine degree of control over variables, including but not limited to switches, controls and surveillance.</td>
</tr>
<tr>
<td>0300.0009</td>
<td>Designs, evaluates, and supervises the installation of measurement and control systems for electrical plants based on data collected in laboratory experiments and in pilot plant operations.</td>
</tr>
<tr>
<td>0300.0010</td>
<td>Develops and evaluates processes to separate components of liquids or gases or generate electrical currents using controlled electrical process.</td>
</tr>
<tr>
<td>0300.0011</td>
<td>Examines and reviews, or supervises the examination and review of plans, drawings, specifications, permits, licenses, applications, and records related to electrical engineering or manufacturing projects to ensure compliance with federal, state, or local regulations.</td>
</tr>
<tr>
<td>0300.0012</td>
<td>Collaborates with scientists, planners, engineers, and other specialists, and experts in law and business to review, prepare, and amend regulatory codes including health and safety procedures, fire-fighting and prevention or to comment on technical aspects or to address electrical issues.</td>
</tr>
<tr>
<td>0300.0013</td>
<td>Reviews or examines plans for the construction, demolition or alteration of structures to comply with the provisions of various codes, laws, rules and/or regulations.</td>
</tr>
<tr>
<td>0300.0014</td>
<td>Signs and seals engineering and other official documents.</td>
</tr>
</tbody>
</table>

You will not receive credit for licenses, education, and/or experience which you obtain after the end of the Application Period (January 31, 2017).

**Residency:** City residency is not required for this position.

**English Requirement:** You must be able to understand and be understood in English.

**Proof of Identity:** Under the Immigration Reform and Control Act of 1986, you must be able to prove your identity and your right to obtain employment in the United States prior to employment with the City of New York.

### REQUIRED INFORMATION:

1. **Affirmation Form:** The Affirmation Form, which is found online, must be printed, signed, dated and sent by mail to the address on the form. If DCAS does not receive your completed Affirmation Form, your application will not be considered complete, and your name will not appear on the eligible list for this examination.

2. **Foreign Education Evaluation Guide (Required only: if you need credit for your foreign education to meet the education and experience requirements):** If you were educated outside the United States, you must have your foreign education evaluated to determine its equivalence to education obtained in the United States. The services that are approved to make this evaluation are listed on the Foreign Education Evaluation Guide located on the DCAS website at [www.nyc.gov/html/dcas/downloads/pdf/misc/foreigneducation.pdf](http://www.nyc.gov/html/dcas/downloads/pdf/misc/foreigneducation.pdf). When you contact the evaluation service, ask for a "document-by-document" (general) evaluation of your foreign education. You must have one of these services submit its evaluation of your foreign education directly to the Department of Citywide Administrative Services no later than eight weeks from the last date for applying for this examination.
THE TEST: Your score will be determined by a license, education, and experience test. You will receive a score of 70 points for meeting the license, education, and experience requirements listed on page 2. After these requirements are met, you will receive additional credit up to a maximum of 100 points on the following basis:

If you have satisfactory full-time experience performing electrical engineering work subsequent to receiving a New York State Professional Engineer's License for:  You will receive:

<table>
<thead>
<tr>
<th>Experience Duration</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 1 year but less than 2 years</td>
<td>5 points</td>
</tr>
<tr>
<td>At least 2 years but less than 3 years</td>
<td>10 points</td>
</tr>
<tr>
<td>At least 3 years but less than 4 years</td>
<td>15 points</td>
</tr>
<tr>
<td>At least 4 years but less than 5 years</td>
<td>20 points</td>
</tr>
<tr>
<td>At least 5 years but less than 6 years</td>
<td>25 points</td>
</tr>
<tr>
<td>6 or more years</td>
<td>30 points</td>
</tr>
</tbody>
</table>

In order to receive credit for satisfactory experience performing electrical engineering work, for each employment you must have performed at least four (4) of the tasks listed in the Electrical Engineer Task Inventory shown in the How to Qualify section on page 3. (For more information, see Item #3B in the Special Insert: Guide for Completing the Online Examination at the end of this document.)

You will receive a maximum of one year of experience credit for each year you worked. If you have any of the above experience on a part-time basis, it will be credited according to the equivalent percent of full-time experience. Experience used to meet the minimum requirements cannot be used to gain additional credit.

You must clearly specify in detail all of your relevant license, education, and experience on your Online Education and Experience Test. You have until midnight Eastern time on the last day of the Application Period (January 31, 2017) to complete and submit your Online Education and Experience Test by clicking on the “Final Submit” button or it will be automatically submitted after midnight on the last day of the Application Period (January 31, 2017). Once your Online Education and Experience Test is final submitted, it will be based on the information you provided and saved. If you are currently employed by the City of New York, be sure to include information about your current job. If you applied for a previous examination, do not assume information you provided on a previous Education and Experience Test has been saved. If you are found “Not Qualified,” you will not be able to submit new or additional information about your license, education, and experience online.

You will not receive credit for licenses, education, and experience, that you obtain after the end of the Application Period (January 31, 2017).

THE TEST RESULTS: Immediately after you have submitted the examination online, you will be informed of the results. If you were found Qualified, you will receive a tentative score. At the time of establishment of the eligible list for this examination, your score will become final, your name will be placed in the final score order on the eligible list, and you will be given a list number. You will be notified by mail of your final test results. If you meet all requirements and conditions, you will be considered for appointment when your name is reached on the eligible list.

CHANGE OF MAILING AND/OR EMAIL ADDRESS: It is critical that you promptly notify DCAS of any change to your mailing address and/or email address. You may miss important information about your exam(s) or consideration for appointment, including important information that may require a response by a specified deadline, if we do not have your correct mailing and/or email address. Change of mailing and/or email address requests submitted to any place other than DCAS, such as your Agency or to the United States Postal Service will NOT update your records with DCAS. To update your mailing and/or email address with DCAS, you must submit a change request by mail or in person. Your request must include your full name, social security number, exam title(s), exam number(s), old mailing and/or email address, and your new mailing and/or email address. Your request can be mailed to DCAS Records Room, 1 Centre Street, 14th Floor, New York, NY 10007 or brought in person to the same address Monday through Friday from 9AM to 5PM.

ADDITIONAL INFORMATION:

Selective Certification for Driver License: If you have a motor vehicle Driver License that is valid in the State of New York, you may be considered for appointment to positions requiring this license through a process called Selective Certification. If you qualify for Selective Certification, you may be given preferred consideration for positions requiring this license. If you wish to apply for this Selective Certification, click on the Selective Certification option and follow the instructions by checking the appropriate selection to indicate your interest in such Selective Certification. Your Driver License will be checked by the appointing agency at the time of promotion. If you are appointed through Selective Certification, you must maintain your motor vehicle Driver License for the duration of your employment.

This requirement may be met at any time during the duration of the list. If you meet the Selective Certification requirement at some future date, please submit a request by mail to: DCAS Bureau of Examinations – Exam Development Group, 1 Centre Street, 14th Floor, New York, NY 10007. Please include the examination title and number, your social security number, and "MVO" on your correspondence.
Application Receipt: You will be emailed a receipt immediately after you have applied for the examination. If you do not receive this receipt, contact this agency at OASys@dcas.nyc.gov. Include your social security number and the examination number and title in your email. You will also be mailed an acknowledgment letter within three months of the last date of the application period. If you do not receive an acknowledgment letter, write to this agency, Attention: Administration, Customer and Exam Support, 1 Centre Street, 14th Floor, New York, NY 10007 to request verification that your application was received. Include your social security number and the examination number and title in your request.

Promotion Test: A promotion examination for this title is being held for eligible employees. The names appearing on the promotion list will be considered first in filling vacancies.

PENALTY FOR MISREPRESENTATION: Any intentional misrepresentation on the application or examination may result in disqualification, even after appointment, and may result in criminal prosecution.

Special Insert: Guide for Completing the Online Examination

This online examination consists of the following sections:

- Application, including the Notice of Examination, Affirmation Form and payment of fee
- Education Level
- Employment/Work Experience
- Licenses, Certificates, and/or Registrations
- Selective Certification
- Survey

There are detailed instructions online for each of these sections, so make sure that you read these instructions before you begin to fill out each section. In addition, the Overview and Frequently Asked Questions (FAQs), which are accessible throughout the examination process, contain valuable information about the online examination process and civil service procedures governing examinations. This guide is a brief summary of some of the items found in these instructions.

1. Prior to Applying for the Examination: This examination requires all candidates to meet the License, Experience, and Education Requirements listed in the How To Qualify section on page 2 of this Notice of Examination (NOE). All candidates must meet the following:

   A valid New York State Professional Engineer’s License and either:
   i. A master’s degree in electrical engineering from an accredited college or university and three (3) years of full-time, satisfactory experience in electrical engineering work; or
   ii. Four (4) years of full-time, satisfactory experience in electrical engineering work.

   Current New York State registration as a Professional Engineer must be maintained for the duration of your employment.

   If you do not meet the License, Education, and Experience Requirements, you will be found NOT QUALIFIED and your application fee will not be refunded.

2. Completing the APPLICATION: You must complete the application and examination by midnight, Eastern time, of the last day of the application period. Your application is not complete until you pay the Application Fee. If you do not complete your application, which includes payment of the application fee, there will be no record that you applied for the examination. Once you complete your application, you will be automatically directed to the Online Education and Experience Test, where you may save your credentials, endorsements, permits, and experience.

3. Completing the Online Education and Experience Test:

   A. Completing the EDUCATION LEVEL section:
      (I) For each degree and/or diploma you select, you must fill out the information requested.
      (II) If you were educated in a foreign country, your examination will be tentatively scored based on the education level you claim. You must arrange for a foreign education evaluation to be sent directly to DCAS by a DCAS-approved foreign education evaluation service no later than eight weeks from the last day of the application period. An acceptable foreign education evaluation must include your full social security number printed on it by the evaluation service. If your foreign education evaluation differs from what you claimed, or if DCAS does not receive an acceptable foreign education evaluation directly from a DCAS-approved evaluation service, DCAS will re-score your examination and may mark you NOT QUALIFIED.

   B. Completing the EMPLOYMENT/WORK EXPERIENCE section: For each job you list you must fill out in detail all of the information requested. A maximum of one year full-time experience will be credited for each 12-month period. Part-time experience will be pro-rated according to the following ranges:

      35 hours per week or more = 100%
      34 hours per week or less will be pro-rated as a percentage of a 35 hour work week

      For each job, you must select the tasks you performed from the tasks listed in the drop-down menu.
In order to receive credit for your experience, you must select at least four (4) tasks from the tasks listed under Task Category #0300.0000. For example, if you select three (3) or fewer tasks from Task Category #0300.0000, the job will not receive credit.

C. Completing the LICENSES, CERTIFICATES, AND/OR REGISTRATIONS section: Fill out the information requested. Under the Licensee, Certificates, and/or Registrations section, select a New York State Professional Engineer’s license from the drop-down menu. On the line labeled Original Date of Issue you must enter the date your license was originally issued, not the date you renewed your registration. Additional credit is granted only for experience acquired after having received a valid New York State Professional Engineer’s License.

D. Completing the SELECTIVE CERTIFICATION Section: This section is optional and will not affect your score.