

## SENIOR OUTSIDE PLANT ENGINEER

### How to Apply

To apply for this position, please include a copy of your resume & a cover letter (this should be the first page of your resume) -- click the **Apply Now** button above.

The salary for this position will be a minimum of \$65,000 annual. Salary will be commensurate with the qualifications, experience, and education of the selected candidate.

### Job Summary

Come join a team of passionate and hard-working individuals at a non-profit serving Michigan's public universities, colleges, K-12 organizations, libraries, state government, healthcare and other Michigan non-profit organizations! This position will be an integral part of the outside plant team.

Merit is seeking a Senior Outside Plant Engineer to join our team in supporting outside plant operations, including maintenance, construction and ongoing quality assurance. This critical role will coordinate with a variety of teams including contractors, subcontractors and vendors. The work is in diverse environments, both indoors and outdoors, to solve complex problems and implement innovative solutions to maintain and expand the outside plant infrastructure. The Senior Outside Plant Engineer interfaces with Merit staff including Outside Plant (OSP), Technology Operations, and 24x7 Merit Support Center teams, in order to coordinate OSP activities, administrative requirements, material handling, etc. The Senior Outside Plant Engineer reports to the Director of Business Process Management and works under general supervision to plan, conduct and at times, supervise assignments. The ideal candidate will have outside plant engineering and construction technical skills; planning, organization, execution, troubleshooting and negotiation skills. On call duties and overtime may be required periodically.

To learn more about Merit, please visit our website: <https://www.merit.edu>

### Responsibilities\*

Essential functions for this position are followed by an (E).

As the Senior Outside Plant Engineer, this position's key responsibilities include, but are not limited to, the following:

Outside Plant Maintenance & Construction (50%):

- Assess maintenance issues, both emergency and non-emergency, to identify fault issue and work with Merit staff and contractors to implement repairs to infrastructure as needed (E)
- Perform complex problem solving and review of related information to develop and evaluate options and implement solutions (E)
- Troubleshoot, identify faults and provide rectification remedies for fiber optic cables using diagnostic tools including OTDR, fusion splicing machine, light source & power meter, loop tester, earth ground fault testers, etc. (E)
- Develop and maintain in-depth knowledge of OSP engineering, construction and splicing related to Merit's fiber optic network (E)
- Be an escalation point for OSP incidents and issues from both external and internal sources. (E)
- Support and review work done by others ensuring that all applicable OSP standards are met (E)
- Ensure effective triage and escalations occur to appropriate individuals, teams, and organizations in a timely manner to ensure efficient resolution and to minimize customer impact (E)
- Inspect and perform quality assurance of OSP activities (E)
- Maintain a safe working environment (E)
- Keep a safe working environment (E)
- Work flexible hours and support on-call duties as required (E)
- Review and coordinate planned maintenance with Merit customers, contractors and partners (E)
- Coordinate preparation and field strategies for deployment and evaluation. Develop and maintain relationships with project staff, members, vendors, contractors, particularly in the field (E)
- Candidate must be able to legally and safely operate University-owned vehicle that is especially equipped to transport, maintain, store, and protect equipment, tools, and materials needed to evaluate and maintain fiber infrastructure located in various locations throughout Michigan, Wisconsin, and Minnesota. (E)

### Engineering, Project Management, & Documentation (30%):

- Develop and administer OSP engineering activities including solution design, cost estimation, time estimation, engineering and construction analysis, onsite meeting support and developing detailed engineering prints (E)
- Respond to questions and inquiries, as appropriate, from the general public, developers, contractors, engineering professionals, utility, permit, governing authorities and Merit staff regarding outside plant engineering and development projects (E)
- Design additions, upgrades, repairs and enhancements to OSP infrastructure in coordination with contractors and other OSP staff (E)
- Select solutions based on the most effective, efficient, and timely design (E)
- Creating winning outcomes for both Merit and other parties when possible (E)
- Review plans, designs, and specifications of outside public or private facility projects to ensure Merit's compliance with current telecommunications facilities in accordance with industry practices, codes, regulations and ordinances. Develop action plans to address network assessment or changes needed to accommodate OSP infrastructure to project needs (E)
- Lead meetings and subsequent coordination activities with pole owners / utilities regarding make-ready submittals, design and construction requirements and activities (E)
- Work with Merit staff contractors to maintain and monitor OSP material stocks at strategic locations (E)
- Interprets and identifies OSP buried underground and aerial telecommunications plant in records, on maps, and in the field with sufficient clarity and detail (E)
- Communicates complex technical issues and recommends solutions to client, project and functional management as directed and as appropriate (E)
- Prepare and maintain fiber assignments and records (E)
- Responsible for inside plant design and demarc extension as required
- Collaborate with CAD/3-GIS personnel to review work prints required for the preparation of construction and as built drawings and review and

finalize documentation (E)

- Review and prepare splice drawings (E)
- Utilize and assist in maintaining Merit's databases of OSP records (E)

Miscellaneous (20%):

- Assist in training existing staff and new hires to bring up to speed knowledge of current and future projects
- Initiate and drive process changes designed to improve operations efficiency and customer satisfaction (E)
- Recommend and implement revisions to existing policies and procedures to make them more effective
- Lead special projects as assigned (E)
- Participate in professional development activities to continually improve skills and knowledge in the areas of project management, networking, IT services and customer service.

**Required Qualifications\***

- Minimum five (5) years professional experience installing, splicing, servicing, and operating physical plant infrastructure
- Must be able to successfully complete a Motor Vehicle Record check through University of Michigan Transportation Services
- Knowledge of outside plant activities including materials, methods, and tools involved in OSP construction (fiber cable design, pole line construction, conduit system design)
- Experience with 24/7 service support policies and procedures
- Knowledge of optical networking hardware
- Past experience managing outside parties to engineer and construct OSP facilities in an aerial, underground, or building environment
- Ability to resolve complex problems following standard practices, using judgment within defined policies and guidelines
- Experience in installation, termination and testing of communication cabling and equipment including patch panels, Cat5, Cat5e, Cat6, and fiber optic cable

- Experience with reviewing plans, designs, and specifications of streets and other public or private facility projects to ensure compliance with current telecommunications facilities in accordance with industry practices, codes, regulations and ordinances
- Ability to interpret CAD design drawings. Familiarity with GIS (Geographic Information Systems), ESRI and shapefile functionality
- Must be attentive to detail, organized, able to work independently and exhibit self-motivation
- Must possess good interpersonal skills in relating to client personnel and the general public
- Strong work ethic and willingness to learn
- Strong computer skills with emphasis on service request or construction tracking systems, Microsoft office applications and Google suite
- Ability to successfully handle multiple priorities simultaneously
- Ability to work flexible hours and support on-call duties as required
- Strong customer service background and demonstrated organizational skills
- Must be self-motivated and work well within a team environment and also have the ability to work independently

### **Desired Qualifications\***

- Experienced in the configuration and installation of DWDM and CWDM optical networks
- Experience with conversion or import of redline or paper copies of telecommunication plant drawings and data into Computer aided-design (CAD), Graphical Information System (GIS) and/or Visio formats
- Skilled with ESRI ArcGIS, Autodesk AutoCAD, KMZ

### **Additional Information**

Merit Network offers excellent benefits and wellness opportunities. This position receives 12 days of vacation per year, paid sick leave with provisions for extended benefits, opportunities for professional development, and retirement options with 2-for-1 matching that include TIAA-CREF and Fidelity Investments. Please visit <https://hr.umich.edu/benefits-wellness> for full benefits information.

Relocation assistance is not available for this position.

**Work Environment:**

Requires working outdoors, exposed to all weather conditions in addition to operating in a professional environment. This role routinely uses standard office equipment such as computers, phones, photocopiers, filing cabinets and fax machines.

**Work Attire:**

Requires wearing common protective or safety equipment.

**Physical Demands:**

The physical demands described here are representative of those that must be met by an employee (with or without accommodations) to successfully perform the essential functions of this job.

- Move items weighing up to 50 pounds as a regular part of duties.
- Pack and move the equipment required for field work to and from the storage space, field workspace, and/or transportation vehicle(s).
- On occasion may be required to move items 50-100 pounds or more. Team lifts are encouraged and employees should ask for a team lift with heavier tasks.
- Assess and gather data from equipment and devices located in various environments, including those inside and outside buildings, located just below ground (such as handhole) or up to 20 feet from the ground, or located in areas that do not have easy vehicle access.

Employee must frequently work at computer station, answer telephone calls, emails, and/or other forms of customer/client communication.

**Other Duties:**

Please note this job description is not designated to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

**Position Type/Expected Hours of Work:**

This is a full-time position, work schedule will be determined by manager and may change if necessary. There may be some occasional work required outside of the established schedule, which may include weekends and holidays. The typical

work schedule is Monday thru Friday, 8:00 AM to 5:00 PM.

**Travel:**

Travel is required.

**Background Screening**

The University of Michigan/Merit Network Inc. conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

**Contact Information**

- If you have any questions regarding this job, please contact:  
[merithr@merit.edu](mailto:merithr@merit.edu)
- If you need assistance completing this application, please call (734) 615-2000, option 1

**Application Deadline**

Job openings are posted for a minimum of seven calendar days. This job may be removed from posting boards and filled any time after the minimum posting period has ended.

**U-M EEO/AA Statement**

The University of Michigan is an equal opportunity/affirmative action employer.

---

## Job Detail

---

**JOB OPENING ID**

165052

**WORK LOCATION**Ann Arbor Campus  
Ann Arbor, MI**ORGANIZATIONAL GROUP**

Affiliated It Orgs

**WORKING TITLE**Senior Outside Plant  
Engineer**FULL/PART TIME**

Full-Time

**DEPARTMENT**

Merit Network

**JOB TITLE**Network Planning Analyst  
Sr**REGULAR/TEMPORARY**

Regular

**POSTING BEGIN/END DATE**

11/08/2018 – 11/22/2018

**CAREER INTEREST**

Information Technology

