

# **ENGINEERING and OPERATIONS INTERNSHIPS**

The challenge of keeping our stations on the air with optimal signals, fully functioning studio equipment and state-of-the-art voice and data sending and receiving technology falls under our engineering department. Closely integrated with our Operations department which manages our computer networks and telecom setup, these two areas often work in tandem. Engineering and Operations are largely responsible for operating within FCC guidelines as well as insuring that work flow is seamless and efficient.

## As an ENGINEERING and OPERATIONS Intern, you will learn:

- How we use various telecom technologies to send and receive voice and data;
- Using automation to schedule and run programming;
- Downloading and uploading content for affiliate networks;
- ISDN, DSL, T-1 and other telecom options and how they are used;
- Optimizing a stations' signal;
- Simulcasting signals and how it works;
- Delay technology in news/talk formats;
- How streaming, podcasting, and on demand technology works.
- FCC rules of operation and responsibilities of licensees;
- The Public File and license renewal;
- Remote technology and how it works;
- Engineering the board and following a log; recording key measurements
- Managing a LAN including access, security, shared files and licensing.
- Managing internet access including intranet, security threats, "cloud" computing and other aspects.
- Differences between AM and FM stations from towers and transmitters to studios and coverage.

### **Time Commitment**

- Student must commit to 10-15 hours per week;
- A 2-3 day per week schedule is preferred, business hours and weekdays only;

### Talents/Skills

- Natural technical ability and analytical mindset;
- Process management and oversight skills;
- Keen appreciation of and respect for authority, in this case, the FCC;
- Strong computer skills, preferably hardware and software based.

### **Required Homework**

Students will be required to examine a particular subset of an engineering/operations process as identified by the supervisor from start to finish, evaluating strengths and weaknesses and offering cost-effective and efficient suggestions for improvement.