



JOB DESCRIPTION

Company:	PPM
Job Title:	Undergraduate Placement Electronics Engineer
Industry:	Electronics Design and Manufacture
Purpose of Job:	PPM is expanding its product portfolio so is strengthening and extending its Shrivenham based development team.
Company Website:	ppm.co.uk
Location:	Swindon SN6 8TY
Reporting to:	Development Team Lead
Salary:	£21,000 p.a
Closing Date:	6 th April 2020
Start Date:	20 th July 2020
How to Apply:	CV and covering letter to pseager@ppm.co.uk

Interview expenses will be reimbursed

Company Background:

At Pulse Power & Measurement (PPM) we design and manufacture a wide range of Radio Frequency (RF) over fibre systems, which allow RF electrical signals to be transmitted over fibre optic cables. Our '**ViaLite Communications**' business division is focused on optical transportation and manipulation of analogue radio communication signals, which are used in applications such as satellite communications, telemetry, broadcasting, cellular base stations and radar. Our "Systems" business division focuses on the application of a broad range of radio frequency technologies to government and defence markets; including RF over fibre, software defined radio, signal switching / routing, and custom antenna and filtering solutions. Find out more by visiting <https://ppm.co.uk/>.

Location: Watchfield, Oxfordshire. Watchfield is 25-30 minutes (by car) from Swindon which has regular direct services to London (just under an hour via train) and 23 miles away from Oxford (approx. 40 mins by car via the A420).

The Role:

PPM is designing an innovative new range of RF, microwave, and optical solutions for SatCom, broadcast, timing, and cellular markets. This role offers you the chance of working on a wide range of RF and analogue designs for a diverse portfolio of radio applications. As part of an

agile design and development team you will have the opportunity to support the development of product concepts and see the design through to manufacture; directly contributing to the company's success. You will be developing your skills in:

- Design from concept through to manufacture of analogue & digital electronics products
- Circuit design and PCB layout for mixed mode RF & digital electronics
- X/Ku/Ka/Q/V-band circuit simulation, fabrication, and test
- Proof of concept and product definition for radio signal matrices
- Radio transceiver design for antenna remoting
- Electronic signal detection, location, and negation
- Developing relationships by liaising with customers and suppliers

Secondary functions of the role could include:

- Cost estimation for special project tender responses
- Advanced test and characterisation of existing products
- Enhancement of internal engineering processes and supporting quality documents.

Skills / experience / qualifications:

The successful candidate will have studied *some* of the following:

- Practical analogue and RF electronics design.
- Broadband RF greater than 10 GHz
- Design for EMC i.e. EMC regulations etc.
- Single-mode fibre optic systems
- Analogue and digital domain signal conversion
- Microcontrollers or similar system on chip integrated circuits
- Linear & non-linear signal measurements (s-parameter, noise figure, intermodulation)
- Antenna design and signal propagation principles

The Person:

The successful candidate will work within a multi-disciplined engineering team and will have the opportunity to use their own interpersonal skills to draw upon existing internal expertise from product designers, mechanical engineers, software developers, photonics experts and system design specialists. They will also present a confident and collaborative interface when dealing with colleagues, sub-contractors, and suppliers through either written or verbal communications.

In addition to meeting customer's needs, solutions will be required to exceed the company's documented quality standards and be delivered within agreed timescales and budgets. The successful candidate will have the opportunity to work on a wide variety of development projects and should be comfortable responding to changing business priorities as they arise.

