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| Northwest A&F University Summer School: July 15 - August5, 2018 - Engineering | | | |
| **Dates** | **Activity and timings** | | |
| **15/7/18** | **Arrive Birmingham Airport. Transfer by coach to Harper Adams University.** | | |
| 16/7/18 | 10-11am Welcome Meeting & administration 11-12.30 tour of campus 12.30-1.30 lunch in QMH 1.30 - 3.30 Newport orientation 4pm - Health& Safety for Engineering | | |
| 17/7/18 | 9.30-11.15 : Introducing yourself  11.30 -12.50: Listening & vocabulary | 12.30-1.30 lunch in QMH | 2-5.30: Bridge building practical Greg Rowsell and Chris Waghorn. |
| 18/7/18 | 9.30-11.15: Listening - Aspects of British Culture 11.30 -12.20: Shrewsbury Orientation | 12.30-1.30 lunch in QMH | **Trip to Shrewsbury - Coach leaves at 1.30pm- returns to HAU 6pm** |
| 19/7/18 | 9.30-11.15: English for Engineering   11.30 -12.50: Achievements in Engineering: reading & speaking | 12.30-1.30 lunch in QMH | 2-5.30: Introduction to robots:  A talk covering robotic projects at Harper Adams, the technology, and a tour of the facilities with Sam Wane |
| 20/7/18 | 9.30-11.15: Speaking activity based on HW 11.30 -12.50: Ironbridge orientation - listening | 12.30-1.30 lunch in QMH | 2-5.30: A practical introduction to the Arduino controller, how to program it and make lights, LCD, motors, switches work, and how to read the sensors (IMU, ultrasonic, compass)  A lecture on the various components and interfaces with Sam Wane |
| **21/7/18** | **Trip to Birmingham- leaving at 9am and return to HAU at 7pm  You will need money to buy lunch and dinner in Birmingham** | | |
| **22/7/18** | **Visit to Lavender farm, Blists Hill Victorian town museum, & Ironbridge. Leaving campus at 9.30am and leaving Ironbridge to return to HAU at 5pm.  Campus supper at 6pm. You will need money to buy lunch.** | | |
| 23/7/18 | 9.30-11.15: vocab & pronunciation - forces & materials 11.30 -12.50: Listening to a lecture | 12.30-1.30 lunch in QMH | 2-5.30: GPS technology  A demonstration of RTK GPS. How to read GPS in the robot, convert to UTM, and calculate distance & bearing. |
| 24/7/18 | 9.30-11.15: Speaking activity based on HW 11.30 -12.00: Computers in Engineering - reading | Packed lunch to collect | **Trip to JCB Engineering. Meet outside QMH - minibus leaves at 12.30pm** |
| 25/7/18 | 9.30-11.15:Vocab & describing processes - 'the future of cars'. 11.30 -12.50: Listening to a lecture - signposting | 12.30-1.30 lunch in QMH | 2-5.30: Behaviours and states in robots  Using the ultrasonic sensor to avoid objects.  Using the IMU for feedback  **Evening: Barbeque meet 6.30pm QMH** |
| 26/7/18 | 9.30-11.15: describing how something works - vocab & collocations.  11.30 -12.50: fixed phrases for clarifying information. | 12.30-1.30 lunch in QMH | 2-5.30: Off road vehicle traction Simon Cooper |
| 27/7/18 | 9.30-11.15: Pronunciation  11.30 -12.50pm: Speaking skills and discussion | 12.30-1.30 lunch in QMH | 2-5.30: Putting it together  Students test their robots with sensors and assess how they can use incorporated behaviours. |
| 28/7/18 | **Wild Woodland session with outdoor activities. Meet outside QMH at 10am. Return to HAU at 9pm**  **Lunch and evening meal provided** | | |
| 29/7/18 | **Visit to Chirk Castle and Poncysyllte Aqueduct – Meet outside QMH at 10am. Return to HAU at 5pm**  **Bring money for lunch. Evening meal at 6pm.** | | |
| 30/7/18 | 9.30-12.30  Students prepare for final presentations | 12.30-1.30 lunch in QMH | 2-5.30pm Driving Experience - meet at Engineering Building |
| 31/7/18 | 9.30-12.30  Students prepare for final presentations | 12.30-1.30 lunch in QMH | 2-5.30: A fun competition for the students to show what they can do. |
| 1/8/18 | 9.30-11.15: Student presentations  11.30 - 1pm: An introduction to HAU MSc programmes | 12.30-1.30 lunch in QMH | 2-5.30: Drainage, irrigation and soil conservation. Paula Misiewicz. **Evening: Final course dinner (meet at 6.15 - dress smart casual).** |
| 2/8/17 | **Breakfast at 7.30am - Coach departs HAU at 8.30am for Oxford/Bicester/London** | | |
| 3/8/18 | **Full day sightseeing in London** | | |
| 4/8/18 | **Visit to Windsor Castle**  **Depart Heathrow Airport evening** | | |
| 5/8/18 | **Return to NWA&FU** | | |