

## Program Physical Demands Analysis

|                     |                                     |                    |           |
|---------------------|-------------------------------------|--------------------|-----------|
| <b>Program</b>      | Power Engineering Technology - T940 | <b>Date</b>        | May 2021  |
| <b>Co-Ordinator</b> | Mark Lambert                        | <b>Chairperson</b> | John Byng |

| STRENGTH                  |                  |                |                          |                          |                                     |                                     |                          |
|---------------------------|------------------|----------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Physical Demands          | WEIGHT           |                | * FREQUENCY              |                          |                                     |                                     |                          |
|                           | Maximum (in lbs) | Usual (in lbs) | Never                    | Seldom                   | Minor                               | Required                            | Major                    |
| Lifting                   | 50               | 10             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Carrying                  | 50               | 10             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Pushing                   | 50               | 10             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Pulling                   | 50               | 10             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Fine Finger Movements     |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Handling                  |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Gripping                  |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Reaching (Above Shoulder) |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Reaching (Below Shoulder) |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Foot Action (1 Foot)      |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Foot Action (2 Foot)      |                  |                | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| <b>Comments:</b>          |                  |                |                          |                          |                                     |                                     |                          |
|                           |                  |                |                          |                          |                                     |                                     |                          |

| MOBILITY         |                          |                                     |                                     |                                     |                          |
|------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Physical Demands | * FREQUENCY              |                                     |                                     |                                     |                          |
|                  | Never                    | Seldom                              | Minor                               | Required                            | Major                    |
| Throwing         | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Sitting          | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Standing         | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Walking          | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Running          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Climbing         | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Bending/Stooping | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Crouching        | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Kneeling         | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Crawling         | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Twisting         | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Balancing        | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <b>Comments:</b> |                          |                                     |                                     |                                     |                          |
|                  |                          |                                     |                                     |                                     |                          |

| SENSORY / PERCEPTUAL   |                          |                          |                          |                                     |                          |
|------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| Physical Demands       | * FREQUENCY              |                          |                          |                                     |                          |
|                        | Never                    | Seldom                   | Minor                    | Required                            | Major                    |
| Hearing – Conversation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Hearing – Other Sounds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Vision – Far           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Vision – Near          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Vision – Colour        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Vision – Depth         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Perception – Spatial   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Perception – Form      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Feeling                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Reading                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Writing                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Speech                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <b>Comments:</b>       |                          |                          |                          |                                     |                          |
|                        |                          |                          |                          |                                     |                          |

| WORK ENVIRONMENT   |                          |                          |                                     |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Physical Demands   | * FREQUENCY              |                          |                                     |                                     |                          |
|  | Never                    | Seldom                   | Minor                               | Required                            | Major                    |
| Inside Work  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Outside Work   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Hot/Cold   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Humid/Dry  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Dust   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Vapour Fumes   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Noise  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Moving Objects   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Hazardous Machines   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Electrical   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Sharp Tools etc.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Radiant/Thermal Energy   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Slippery   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Congested Worksite   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| <b>Comments:</b>   |                          |                          |                                     |                                     |                          |
| Working in hot and loud power plant and may be exposed to outdoor environment.<br>Students are required to wear the following PPE: Safety glasses, safety boots, hardhat, hearing protection, eye protection, thermal and dexterity gloves and long sleeves. |                          |                          |                                     |                                     |                          |

| CONDITIONS OF WORK   |                          |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| Physical Demands   | * FREQUENCY              |                          |                          |                                     |                                     |
|  | Never                    | Seldom                   | Minor                    | Required                            | Major                               |
| Travelling   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Work Alone   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Work Independent but in group  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Deadline Pressures   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Interact with Public   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Operate Equipment/ Machinery   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>Comments:</b>   |                          |                          |                          |                                     |                                     |
| Working in hot and loud power plants, and may be exposed to outdoor environment. |                          |                          |                          |                                     |                                     |

| Accessibility         |   |
|-----------------------|---|
| Wheelchair accessible | <input type="checkbox"/> yes <input checked="" type="checkbox"/> no |
| <b>Comments:</b>      |   |
|                       |   |

**\* Frequency:**  
 Never ..... Not performed.  
 Seldom ..... Seldom performed. Not daily.  
 Minor ..... Minor daily activity. Less than 1 hour  
 Required ..... Frequent repetition, for 1-3 hours daily

Major.....Major job demand. Maximum ability required. Frequent repetition for more than 3 hours daily.