**PROJECT MANAGEMENT**

**Learning Outcome 1: ACTIVITY 5**

**GROUP/PAIRS ACTIVITY**

**The work breakdown structure (WBS) for a sports centre**

A sports centre construction project has a work breakdown structure broken down into five elements below the overall project (coded 1). Each element is broken down further by activity and is coded logically, and this has enabled the planning engineers to estimate the man-hours required for each element:

|  |  |  |
| --- | --- | --- |
| **WBS code** | **Description** | **Man-hour estimate** |
| **1.1** | **Site work** | **30,000** |
| 1.1.1 | Site grading | 11,000 |
| 1.1.2 | Excavation | 6,000 |
| 1.1.3 | Parking | 5,000 |
| 1.1.4 | Foundations | 8,000 |
| **1.2** | **Exterior** | **40,000** |
| 1.2.1 | Framing | 4,000 |
| 1.2.2 | Siding | 5,000 |
| 1.2.3 | Windows | 11,000 |
| 1.2.4 | Entrances | 5,000 |
| 1.2.5 | Insulation | 3,000 |
| 1.2.6 | Roofing | 12,000 |
| **1.3** | **Interior** | **30,000** |
| 1.3.1 | Flooring | 8,000 |
| 1.3.2 | Stairways | 9,000 |
| 1.3.3 | Walls | 9,000 |
| 1.3.4 | Doors | 4,000 |
| **1.4** | **Electrical** | **10,000** |
| 1.4.1 | Cabling | 2,000 |
| 1.4.2 | Devices | 3,000 |
| 1.4.3 | Lighting | 5,000 |
| **1.5** | **Mechanical** | **20,000** |
| 1.5.1 | Heating/Cooling | 15,000 |
| 1.5.2 | Hot water | 3,000 |
| 1.5.3 | Toilets | 2,000 |

Based on the information provided calculate the overall man-hour estimate for the entire project.

If the average cost of one man-hour is $32, what is the overall cost estimate for the project?