JHLP Leadership Capabilities

The Jerry Holmes Leadership Program provides students with developmental experiences designed to enhance their abilities in five domains: personal achievement, interpersonal relationships, management and teamwork, leadership, and intercultural understanding. Specific skills are associated with each domain. This document incorporates many elements of the RCEL Engineering Leadership Certificate Handbook published by the Rice Center for Engineering Leadership, Rice University.* Their assistance and generosity are greatly appreciated. We also gratefully acknowledge the work of the Bernard M. Gordon-MIT Engineering Leadership Program and the Institute for Engineering Leadership Education at the University of Toronto.

The Personal Domain

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<tr>
<th>Capability</th>
<th>Components</th>
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<tr>
<td><strong>1. Developing self-awareness</strong> — an ability to understand oneself and one’s aspirations and possibilities</td>
<td>• Develops an accurate and practical understanding of “who I am” and “who I can become” • Knows personal strengths, constraints, and development opportunities • Practices self-control • Develops self-confidence • Routinely seeks out and receives feedback from others • Knows one’s basic needs, motivations, and values • Possesses intellectual humility • Strengthens one’s ethical values and principles</td>
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<td><strong>2. Setting and achieving goals</strong> — knowing how to set personal goals, allocate resources accordingly, monitor progress, and achieve results.</td>
<td>• Has a personal and professional vision • Sets SMART goals • Takes initiative • Plans, monitors, and manages goal achievement • Develops drive, perseverance, and resourcefulness • Achieves measurable results and learns from the process</td>
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<td><strong>3. Problem-solving and decision-making</strong> — the ability to make effective decisions using rational and creative methods</td>
<td>• Understands common decision-making heuristics and biases • Defines problems, generates alternatives, evaluates alternatives, implements solutions • Is comfortable with ambiguity; does not rush to reach a decision • Makes decisions with confidence • Practices practical ingenuity • Practices open-mindedness • Learns from problem-solving experiences • Builds capacity for creativity and innovation</td>
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<tr>
<td><strong>4. Building technical and financial expertise</strong></td>
<td>• Developing technical skills that distinguish one from one’s peers • Developing a working knowledge of business finance</td>
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*For the sake of readability, excerpts from the RCEL Handbook are not indicated by quotations.
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| 5. Practicing good followership — Being a positive, productive, and sometimes outstanding individual contributor | • Assesses current commitments and allocates time and effort to make a positive and productive impact  
• Knows how to discover what is expected for strong results  
• Delivers outstanding results  
• Knows when to step back and allow another person to take the lead  
• Actively contributes to the group decision-making process  
• Supports the group leader  
• Challenges the status quo, especially when it is the "right thing to do"                                                                 |
| 6. Building positive relationships — The ability to initiate, create, and maintain mutually satisfying and beneficial relationships and social ties | • Develops perceptivity regarding others' emotions and social styles  
• Builds mutually satisfying and beneficial relationships  
• Acts with compassion  
• Builds trust and credibility  
• Assesses current networks for personal and professional purposes  
• Builds and manages networks  
• Speaks and acts with civility; promotes an environment of civility                                                                 |
| 7. Practicing inclusivity                      | • Speaks and acts in ways that affirm the value of all people  
• Promotes fairness  
• Encourages input from all group members  
• Understands and recognizes implicit bias  
• Deploys strategies to counteract the effects of bias  
• Acts as an ally for people who may feel excluded                                                                 |
| 8. Collaboration                               | • Works effectively within a group to accomplish the group's goals  
• Facilitates good teamwork processes  
• Deploys strategies for capturing, discussing, and evaluating ideas  
• Uses established techniques to manage group discussions  
• Makes sure all members of a group feel free to contribute                                                                 |
| 9. Managing conflict and negotiation — The ability to experience and manage differences in constructive ways | • Diagnoses sources of conflict  
• Manages emotions surrounding conflict  
• Values and learns from diversity  
• Understands one's preferred conflict management style  
• Matches appropriate conflict management styles to conflict situation                                                                 |
| 10. Communicating effectively                  | • Chooses appropriate communication strategies  
• Crafts the message to fit the audience  
• Designs effective visual aids  
• Is confident and articulate when speaking in public  
• Uses effective written communication practices |
## The Management and Teamwork Domain

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| **11. Organizing** – Designing and developing a structure to achieve desired results | • Identifies needs and requirements*  
• Creates an overall structure of shared responsibilities and interrelationships  
• Creates individual role requirements, responsibilities, and expectations  
• Establishes processes for transition and succession |
| **12. Working in a team** | • Effectively composes and launches project teams  
• Coordinates the efforts of team members  
• Stays aware of the actions of other team members  
• Engages in backup behavior as needed  
• Documents team practices and processes; stores and disseminates information appropriately  
• Encourages shared leadership practices within a team  
• Promotes team-level learning  
• Acts in ways that promote and improve the team’s overall capacity for leadership |
| **13. Staffing** – Assessing and selecting individuals for specific roles | • Identifies the skills needed to meet the team’s objectives  
• Assesses the skills and interests currently possessed by team members  
• Recruits and selects people for roles, based on team needs and individuals’ interests and strengths |
| **14. Managing projects** | • Understands principles and tools of project management  
• Creates plans to achieve goals and objectives in accordance with the organization’s vision  
• Implements and updating plans to achieve desired results  
• Coordinates group members’ efforts  
• Understands budgeting; can manage financial resources  
• Can deliver a project on time, on budget, and to specification. |
| **15. Training & mentoring** | • Shares knowledge and expertise with others  
• Coaches others  
• Mentors younger or less-experienced students |
| **16. Empowering and delegating** – Enabling others to have the authority, control, and voice in achieving shared objectives and making group decisions | • Diagnoses situations where empowerment or delegation is appropriate  
• Deploys strategies for enabling others to become empowered and confident in their roles  
• Uses delegation strategies appropriately in decision-making situations  
• Employs good follow-up practices  
• Practices effective group decision-making |

*Fleishman et al., 1991*
# The Leadership Domain

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| 17. Creating a shared vision – Creating and implementing a shared vision, goals, & objectives for achieving these aspirations | - Defines purpose, goals, and strategies  
- Creates awareness of strategic context or environment (sense-making)  
- Creates a shared vision and mission  
- Translates mission into goals, objectives, and measures of success |
| 18. Motivating and inspiring others – Creating an environment that enhances the ability, motivation, and opportunities among members to achieve outstanding results | - Communicates a clear and meaningful vision  
- Understands intrinsic and extrinsic motivation  
- Builds a work environment that fosters intrinsic motivation  
- Uses rewards and recognition appropriately to enhance motivation  
- Uses rhetorical strategies to enhance the effectiveness of communications  
- Diagnoses performance problems  
- Deploys appropriate strategies for resolving performance problems |
| 19. Adapting leadership styles – Using a repertoire of different leadership styles to meet the specific situational requirements | - Understands and relates to people as individuals  
- Understands and relates to people as individuals  
- Selects behavioral strategies to meet specific situational needs (i.e., balancing a focus on relationships versus delivering results). |
| 20. Building power and influence – Understanding the existence and necessity of power and building power for ethical and shared purposes. The ability to gain others’ attention, commitment, and cooperation. | - Understands the relationship between power and influence  
- Diagnoses sources of personal, positional, and nonpositional power and influence  
- Diagnoses situations to select appropriate influence strategy  
- Knows how to influence upwards  
- Builds and manages personal sources of influence  
- Manages positional sources of power  
- Knows how to convert power into influence |
| 21. Boundary Spanning – Politically oriented communication that increases the resources available to the team and networking communication which expands the amount and variety of information that is available to the team** | - Works with stakeholders, suppliers, sponsors, and other organizations to increase the group’s personnel, material, and/or financial resources  
- Understands the political environment of the larger organization  
- Builds connections between one’s group and other groups |
| 22. Leading change – Creating and implementing positive and lasting change | - Identifies a need for change  
- Imagines new possibilities  
- Works with others to effect change  
- Becomes comfortable with the chaos associated with change  
- Creates and implements a process for sustaining improvements |

*Burke et al., 2006
### The Intercultural Domain

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<td><strong>23. Understanding cultural dimensions of leadership</strong></td>
<td>• Recognizes the influence of culture on the understanding of leadership</td>
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<td>• Can identify leadership attributes that are common across cultures</td>
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<td>• Can identify leadership attributes that are culturally conditioned</td>
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<td><strong>24. Intercultural communication</strong></td>
<td>• Understands the communication patterns characteristic of high-context and low-context cultures</td>
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<td>• Can adapt one’s own communication style to better work with people of other cultures</td>
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<td><strong>25. Understanding the global context of engineering practice</strong></td>
<td>• Understands how engineers from different countries/cultures frame problems and pursue solutions</td>
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<td>• Works effectively in teams of engineers from different countries and/or cultures</td>
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<td><strong>26. Working with other professions</strong></td>
<td>• Works effectively with people from non-technical backgrounds</td>
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<td>• Values the contributions of team members from nontechnical backgrounds</td>
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Sources


