

## Intelligent Engineering Practice

## Overview of our Practice

MANTECH's Intelligent Engineering
Practice provides tailored solutions
for complex technological challenges,
enhancing mission effectiveness and
operating efficiencies. By leveraging
systems thinking, advanced computing,
modeling and simulation, analytics,
and Al, we accelerate design and
deployment, reduce costs and risks, and
drive enterprise efficiency and informed
decision-making.

Through our Engineering services we deliver cuttingedge technologies to address emerging threats and operational challenges. Our approach includes:

- Quick Access: Rapid deployment of qualified and certified multidisciplinary teams.
- Optimal Solutions: Collaborative and integrated digital environments for best-in-class results.
- Client Collaboration: Asynchronous reviews and responsive updates ensure client alignment.
- Mission Focus: Mission-centric solutions co-created with users and practitioners.
- Rapid Delivery: Speed of relevance achieved through rapid prototyping and streamlined fielding.
   Our experts are dedicated to helping clients adopt and implement Systems Engineering and Development,
   Security, and Operations (DevSecOps) methodologies.
   Through our comprehensive suite of services and solutions, we empower clients to navigate complex digital engineering efforts, ensuring the development and delivery of secure, resilient, and high-performing systems that meet mission objectives efficiently and effectively.



## The MANTECH Advantage: Mission Accelerated; Expertise Driven

We understand the unique challenges faced by our client. MANTECH unites deep platform and mission proficiency with engineering expertise to provide comprehensive solutions. Our commitment to open, modular, and technology-agnostic systems guarantees adaptability through adherence to industry standards. MANTECH digitally optimizes engineering processes, employing a semantic layer to improve workflows with analytics, automation, augmentation, and artificial intelligence, and we utilize digital twins and virtual environments to expedite delivery.



| Intelligent Engineering Service Lines   |   |
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| Service Line  | Description   |
| Digital Engineering & Systems Engineering   | The service line integrates advanced digital modeling and agile methodologies with proven en engineering discipline to build complex mission systems with greater speed, precision, and confidence. We empower clients to reduce risk and accelerate delivery by using data-driven insights and digital twins to optimize and secure solutions throughout their entire lifecycle.   |
| Digital Services Ecosystem<br>& Software Engineering  | The service line utilizes Agile and DevSecOps methodologies to manage and deliver modern engineering environments to build tailored and custom, cloud-native applications that modernize legacy platforms and accelerate mission capability delivery. We deliver resilient, scalable software solutions that enable seamless data integration across the enterprise, ensuring your users get secure and powerful tools faster than ever before. |
| Electromagnetic Spectrum Operations & Warfare   | The service line delivers the advanced engineering for superior Signals Intelligence and Electronic Warfare systems required to dominate the invisible battlespace. We empower clients to disrupt adversary operations and protect critical assets, ensuring information superiority and mission success in the most contested environments.  |
| Space Systems   | The service line delivers space superiority by expertly integrating complex systems, developing advanced space command and control (C2) solutions, and leveraging predictive modeling and simulation for mission success. This comprehensive approach ensures clients have assured control over their assets, from digitally validating launch procedures to executing resilient on-orbit operations.   |
| Autonomous and<br>Unmanned Systems  | The service line focuses on the complex integration of diverse structures and payloads onto unmanned platforms, using advanced modeling and simulation to validate mission performance before deployment. This systems-level approach provides clients with a deeper understanding of command and control (C2) and how these autonomous assets operate as a cohesive part of a larger system of systems.  |
| Battle Management,<br>Command, Control,<br>Communications,<br>Computers, Cyber, and<br>Combat Systems | The service line acts as a master integrator, engineering the secure, interconnected nervous system for the modern battlespace by modernizing combat platforms and enabling Joint All-Domain Command and Control (JADC2). Our work breaks down operational silos to create a unified fighting force, empowering commanders with the information dominance needed to decide and act faster than any adversary.                                   |

In business more than 57 years, MANTECH excels in cognitive cyber, AI, data collection & analytics, enterprise IT, systems engineering and software application development solutions that support national and homeland security.