Our Mission
Enable the learning and development of extraordinary, innovative leaders that will bring new levels of creativity, vision, an integrity to business and society.
make
collaborate
explore
learn
The Team
Matthew S. Kressy, director and founder of the MIT Integrated Design & Management (IDM) master’s degree track, is an expert in product design and development. As an entrepreneur and founder of Designturn, he has designed, invented, engineered, and manufactured products for startups, Fortune 500 companies, and everything in between.

Kressy believes in interdisciplinary, design-driven product development derived from deep user research, creative concept generation, and rapid prototype iteration. He is passionate about teaching this approach to the design process. In fact, since 1999, Kressy has co-taught collaborative courses in product design and development at top design and business schools including the MIT Sloan School of Management, the Rhode Island School of Design (RISD), and Harvard Business School.

As IDM director, Kressy leads curriculum development and teaches the track’s primary and required courses. He holds a BFA in industrial design from RISD.
Steven D. Eppinger is a professor of management science at the MIT Sloan School of Management. He is the faculty codirector of System Design and Management, a program that features master’s degree tracks in integrated product development and in complex system development.

Eppinger teaches courses in product design and innovation, engineering project management, and product management. Notably, he has created an interdisciplinary product development course in which graduate students from engineering, management, and industrial design programs collaborate to develop new products. He also teaches Sloan MBA and executive programs. He is the co-author of a leading textbook, Product Design and Development (McGraw-Hill), which is now in its sixth edition.

A highly recognized scholar in the area of product development and technical project management, Eppinger helped pioneer the widely used Design Structure Matrix (DSM) method for managing complex system projects. He is also the co-author of a book based on DSM research, Design Structure Matrix Methods and Applications (MIT Press).

Eppinger received SB, SM, and ScD degrees from MIT’s Department of Mechanical Engineering before joining the MIT faculty in 1988. He has received many awards and honors.
Even before Andy MacInnis went to college, his life was full of creative pursuits—from constructing his first train sets, plastic models, bicycles, and tree forts through to garage boat building and art classes. The Rhode Island School of Design set fire to the designer in him and gave a purpose to his burgeoning skills.

Upon graduating, he joined a team of seasoned builders to create world-class racing boats, fabricating components from composite materials. That led to an apprenticeship with a designer/engineer who gave MacInnis an old-school foundation in model-making and prototyping for product design. With a move to Boston, MacInnis entered the mainstream of design as the shop manager at the area’s largest firm, where he created a professional shop and implemented best practices. Newfound confidence and a desire to be challenged prompted him to found Monster Prototype, which over a period of 10 years grew into the go-to model and prototype firm in the Boston area. Clients included designers and manufacturers in the consumer product, medical, footwear, and sports industries. His product development work led to his involvement in soldier-worn protective equipment, resulting in the introduction of several groundbreaking products for industry leaders.

All of this experience is now making it's way to MIT's IDM students by way of hands-on, workshops, where dirty hands are expected. And, when he's not at home with his young family, MacInnis finds restoring cars, bicycles, furniture, and houses competes for time with his love of small boats.
Serena Cheng incorporates real-world experience into the business courses she teaches in the MIT Integrated Design & Management master’s program. Inspired by technology, design, and business, she integrates these elements to launch exciting new ventures and bring innovative products to market.

Cheng began her career in the semiconductor industry as a hardware and software development engineer at KLA-Tencor. During graduate school, she complemented her expertise in technology and problem-solving by building design and business skills, and then worked with an MIT engineering team to co-found the social venture, OneWorld Medical Devices.

As a product marketing manager for Apple in San Francisco, Cheng defined hardware requirements and user experiences and created marketing positioning for the Mac notebook lineup. She complemented her hardware expertise with software and platform strengths at Google, leading go-to-market strategy and cross-functional teams for both Chrome and Android, and rapidly expanding Chromebooks and Nexus products worldwide. As an independent consultant, she executed business and product development strategy for early-stage startups.

Passionate about social responsibility, travel, and health, Cheng is an advisor for the Mentor Capital Network and Global Social Venture, a certified yoga instructor, and an avid world traveler and triathlete.

She holds degrees in engineering from the University of Wisconsin–Madison and in design and media from the University of California, Berkeley; along with an MBA from the MIT Sloan School of Management.
Lennon Rodgers is a mechanical engineer with a passion for design, teaching, and research. Though he started out as a confused art student, he ended up earning a BS from the University of Illinois at Urbana-Champaign and ultimately an MS and a PhD from MIT—all in mechanical engineering. He worked for three years at the Jet Propulsion Laboratory managed by the California Institute of Technology, where he specialized in ground- and space-based telescopes. His research at MIT centers on modeling, designing, building, instrumenting, and testing complex systems. These range from a miniature docking port for an International Space Station test bed to an electric motorcycle for the world’s oldest motorcycle race. He has spent more than two years teaching design courses, creating maker spaces, and performing design-related research in Germany, India, Russia, Singapore, and Switzerland.
Students
Honey Bajaj

A Global Shaper-Innovation Lead with the World Economic Forum, Honey has conducted design thinking workshops for many prestigious institutions. She believes that imagination, empathy, and intuitive leaps—combined with extensive research—are essential for innovation. Honey is focused on identifying the patterns that underlie the reality of human behavior, and then learning from reactions, probes, and prototypes to design affordable, user-centric products for social impact. After graduating from Srishti School of Art, Design, and Technology in Bangalore, Honey became a member of the core team at Embrace Innovations that conceptualized and developed an innovative and low-cost infant warmer for premature and low-birth-weight babies in developing countries. “The motivation of building products and the rush of rapidly converting an idea into something tangible is incomparable,” she explains. Honey is also keen about translating her experiences into real solutions and drawing from the experiences of her IDM peers to deepen her understanding of the human-centered design approach. “The program is catalyzing my vision of creating a technology-based social enterprise and providing a holistic perspective on developing new ideas. I want to inspire new ways of solving user challenges.”

Anuj Bheda

Anuj aims to be precisely the type of innovative leader that IDM envisions to develop. His undergrad education at Nanyang Technological University and his internships at PayPal and MIT have greatly influenced his perspectives about technology and design. As a technology consultant at Teach For India, he designed and built a social network, an event management system for inspired, and career management and teacher training portals. “Working with a leading nonprofit in India has instilled in me the value of giving back to the community,” he says. Anuj is passionate about the Internet, mobile devices, and vertically integrated experiences that can create absolute delight for users. As a co-founder of 99, he is responsible for designing and building listing and lead management tools for real estate professionals. “I’m super excited about what the intersection of design, business, and engineering can do for humanity,” says Anuj. “In the end, it’s all about how much of a net positive impact you can bring about for the people around you—and IDM inspires me to work toward building the things that will do so.”
Ben Coble

Ben is an enthusiastic designer who is always focused on the end user. His passion for collaboration is only surpassed by his ability to come up with 99 solutions to a given problem—just ask him about the basketball and the hoop. After graduating from Virginia Tech, he began working at Kobalt as an industrial designer with responsibility for all phases of the design process. Where does Ben see himself in the future? “My goal is simple: I want to become the best designer that I can be.” That means making meaningful contributions to the way people interact with the world around them, and starting a business that’s built on fulfilling user needs. It’s clear that MIT has a lot to offer, but Ben looks forward to sharing his knowledge and fostering the development of others. That said, the most important thing he plans to contribute is success. “Being an effective designer requires more than just sketching and rendering abilities, which is why the IDM program at MIT stands out to me.”

Ismail Degani

An avid violinist, Ismail performed in the Cornell Symphony Orchestra during his undergraduate years. He started out in software consulting, implementing everything from financial pricing models to statistical analysis tools for the Centers for Disease control. Now Ismail is focused on high-tech consumer product development, building mobile apps, custom drones, and most recently an ultra-high resolution printer for smartphones called SnapJet. As the founder and CEO of SnapJet, Ismail believes that beautifully designed, mass-market appliances are necessities in every middle-class household across the globe. “This is the next big opportunity in hardware, and I want to pursue it fearlessly with the skills and network of IDM behind me. An open-hardware conglomerate that fully realizes the value of great design, economies of scale, economies of standardization, and community trust will truly send shockwaves through the balance sheets of its proprietary competitors.” With the support of his IDM teammates, Ismail is confident in his ability to build more ambitious products and companies—and through these contributions make a lasting impact in the art of hardware design.
Manuj Dharwal

Manuj is the founder and chief product officer of MadRat Games and the creator of the “World’s First Hindi Word Building Game—AKSHARIT™. Used in 3,000 schools across India, the educational version is the result of his desire to re-create the experience of playing games with his grandfather. Manuj’s journey into serious games began shortly after graduating from Indian Institute of Technology, Guwahati, when he won one of India’s topmost business plan competitions for showcasing AKSHARIT. When asked during a job interview what made him unique, he replied: “Give me 10 random things, close me in a room for an hour, and I’ll make a game out of them!” Since then, Manuj has partnered with Nokia, Google, and Intel to launch more than 50 learning, wellness, and family game products. To realize his vision of touching one billion lives in a meaningful way, Manuj felt compelled to return to the drawing board. “What better way to achieve my goal than through IDM—an interdisciplinary program that combines the best of design, engineering, and management.”

Chacha Durazo

A mechanical engineer and designer by trait, a chef at heart, and a cat lover through and through, Chacha has one goal in life: to do real and permanent good in this world. “Let the number of people I inspire 200 years from now be the measure of my success,” she says. After earning an engineering degree at MIT, Chacha studied at a culinary school in Italy. She plans to own an Italian restaurant, design the kitchen, run the business, and down the line run for governor and president. “As an undergraduate, I was told that I could solve any problem. I believe an engineer’s way of thinking can effectively achieve much progress in the often bogged-down political system.” When Chacha met with Matt Kressy, she was excited about the flexibility of the program, which allowed for her thesis to be a set of actions for social justice as opposed to a physical product. “Let the number of people I inspire 200 years from now be the measure of my success. One way or another, I will change the world, and this program will help me do so.”
When Talha studied mechanical engineering at Ghulam Ishaq Khan Institute of Engineering Sciences and Technology in Pakistan, he became interested in every exciting project in electronics, software, and mechanical engineering. Soon he set up the university’s first Formula Student society, and designed the flagship vehicle from scratch. As part of his thesis on the Francis turbine operation at Tarbela Dam, he helped engineers to revamp the dam design and understand the cost and operational benefits of using it. “Developing countries have a different need for design, which I aim to fulfill. Working in design and engineering has taught me a lot about the market and user trends,” he says. His primary objective is to learn how to successfully scale practical products and use that knowledge to develop, market, and disseminate those designs in Pakistan. Talha believes that the IDM program will polish his abilities and broaden his horizons. “As Dr. Paul Polak says, ‘Go to where the action is, listen with your soul, and think big. Or don’t bother.’ At MIT, I’m already where the action is—and well on my way to becoming a successful entrepreneur.”

Aceil Halaby

“I find great pleasure in thinking out of the box and contributing to value creation through innovation,” says Aceil. As a millennial working in the real estate industry in the Middle East, Aceil belongs to a generation that pushes for innovation, embraces change, and takes many risks. “There’s a gap between the current paradigm of real estate products and my generation of digital, plugged-in urban dwellers,” she explains. Her goal is to build future cities that drive social development and entrepreneurial growth. After graduating from Rhode Island School of Design, Aceil joined Benchmark Development. She established an in-house design team, introduced the firm to social media, and led product design initiatives while working with world-renowned architects. It was difficult to find a graduate program that provided the technological edge to support her research activities as well as a people-centric learning experience. “The IDM program not only offers me the right set of tools and skills to kick-start the next stage of my career,” she says, “but also enables me to add value through innovation and collaboration with my peers.”

Talha Hasan

When Talha studied mechanical engineering at Ghulam Ishaq Khan Institute of Engineering Sciences and Technology in Pakistan, he became interested in every exciting project in electronics, software, and mechanical engineering. Soon he set up the university’s first Formula Student society, and designed the flagship vehicle from scratch. As part of his thesis on the Francis turbine operation at Tarbela Dam, he helped engineers to revamp the dam design and understand the cost and operational benefits of using it. “Developing countries have a different need for design, which I aim to fulfill. Working in design and engineering has taught me a lot about the market and user trends,” he says. His primary objective is to learn how to successfully scale practical products and use that knowledge to develop, market, and disseminate those designs in Pakistan. Talha believes that the IDM program will polish his abilities and broaden his horizons. “As Dr. Paul Polak says, ‘Go to where the action is, listen with your soul, and think big. Or don’t bother.’ At MIT, I’m already where the action is—and well on my way to becoming a successful entrepreneur.”
“I’m passionate about creating crazy ideas,” says Charles. “From mobile apps to websites, marketing strategies to new business models, individual robots to home automation systems, innovation is part of my life.” After earning a dual degree in robotics engineering and mechanical engineering at Worcester Polytechnic Institute, Charles began working at Philips Healthcare as a mechanical design engineer. Soon he became responsible for implementing a fall simulation robot and designing mechanical components for award-winning products. Charles believes that IDM’s multidisciplinary curriculum will help him reach his long-term goal of starting a robotics company. “The robotics industry will be growing tremendously and improving our society in the near future,” he says. “From home robots that can help seniors live more independently to industrial robots that can help factories operate more efficiently, robotics will unprecedentedly influence our world.” As robots become the new trend, Charles knows that proficient engineering knowledge, creative design thinking, and effective business models will determine the success of their applications. During his journey at IDM, he hopes to create the next big thing—a robotic system that can help people navigate daily life.

Huda Jaffer

A designer of products, services, and systems, Huda has a keen interest in user-centric design for solving sustainability and developmental issues. In 2012, she received the Vocational Excellence award from Rotary Bangalore for displaying path-breaking leadership. “Being open minded and eager to learn from and understand every entity surrounding a problem has helped me redefine and expand my role as a designer,” she says. Huda is deeply passionate about building innovative solutions that are socially, environmentally, and financially sustainable. After graduating as a product and user interface designer from Srishti School of Art, Design, and Technology, Huda started as a product designer for SELCO India, and served as a design and sustainability consultant for the Innovation Center for the Poor. As the lead designer and head of urban poverty labs and senior management at SELCO Foundation, she is actively involved in design projects across various under served user segments, providing solutions that span social, technical, and financial innovations. “After completing the IDM program, I hope to inspire, support, and lead social enterprises that will enable future generations to be agents and champions of sustainability in developing nations.”

Charles Lin
**Masakazu Nagata**

A samurai from Japan, Masa is the son of ceramic tilers who made buildings aesthetically beautiful and practically useful. “This environment taught me the pleasure of creation, cultivated my imagination, and led me into a design career,” he shares. After earning an engineering degree at Kyoto Institute of Technology, Masa worked as a user interface designer with engineers, marketers, researchers, and customers. At Samsung, he realized that design has the potential not only to make products beautiful and easy to use, but also to make people proactive in opening up their side of creativity. He led an integrated design project to create a new smartphone design concept. Masa’s long-term goal is to be a creative bridge to improve lives. “I want to start my own consultancy business, introduce the creative culture to my clients, and enhance their organizations through the power of design.” In the IDM program, he is learning how to integrate design with engineering and business—and gaining the knowledge that will empower him to be an innovative leader.

**Sara Remsen**

“I have always loved connecting the dots between disciplines,” says Sara. “At 11, I asked my dad to teach me how to solder so I could assemble the circuit board for my robot bug.” A scientist and entrepreneur, Sara works at the intersection of biology, education, multimedia, and design. After studying biology and digital arts at Dartmouth College, she taught ninth-grade biology at Noble and Greenough School and transitioned to education technology at Boundless, a technology startup that promotes open access to education through digital textbooks. As an experiment in entrepreneurship, she and her college roommate founded Bellwether Rugs to redesign the experience of purchasing a high-quality, handmade rug. Sara plans to pursue a career in bio-inspired design, combining her love of fun animal facts and inspiring intellectual curiosity through 3D visualization. As a leader in biomimicry, she plans to help students and professionals investigate, collaborate, and experiment to develop nature-inspired solutions. “When I first learned about the IDM program, I recognized it as the ideal next step to pursue my passions for science, technology, art, and design.”
During a design competition at National Taiwan University, Tammy earned the Award of Excellence for her innovative combination of elements. That achievement inspired her to take advantage of the exchange program at the Royal Institute of Technology in Stockholm. When she returned home, Tammy cofounded Rawant’s Lab based on the belief that invention can create a better world—and everyone has the potential to be an inventor. Tammy not only is a creative and enthusiastic engineer, but also a caring designer and entrepreneur. She created a rabbit-shaped social robot that enables children with autism to express their inner thoughts. “Developing the functionality, locomotion, and child-appealing exterior has been challenging,” she says, “but the potential to help children makes the effort very rewarding.” Tammy was drawn to the IDM program because of its mission to develop the next generation of multidisciplinary innovators, designers, and thought leaders. Her future goal is to launch a company under her own brand with a focus on designing and producing unique products that help people. “An MIT master's degree in IDM will play an essential role in helping me to achieve my dream.”

“If my life were a jigsaw puzzle,” says Alicia, “IDM would be the perfect fit for an important missing piece—an interdisciplinary experience that can unlock my potential.” Born in Costa Rica, Alicia graduated from Tecnolóógico de Monterrey, Mexico (ITESM), where she founded the ITESM Student Group and ACM-W Student Chapter for Women in Technology. A passionate and active collaborator, she believes that the best things in life are better when shared. In 2015, she helped launch the Costa Rican National Network for Women in Science and Technology (MENTE), and she’s been the streaming director for TEDx Talks in Costa Rica since 2010. For the past six years, Alicia has been creating testing solutions in the smart-grid, automotive, and networking fields for leading companies like Hewlett-Packard and Teradyne. “I want to be part of building successful disruptive products,” she says. “There’s no better moment than now to think big, make it matter, and change the world. The IDM faculty is empowering me to push beyond my limits, open my mind to new ideas, and break barriers.”

Alicia Chong Rodriguez

Tammy Shen

During a design competition at National Taiwan University, Tammy earned the Award of Excellence for her innovative combination of elements. That achievement inspired her to take advantage of the exchange program at the Royal Institute of Technology in Stockholm. When she returned home, Tammy cofounded Rawant’s Lab based on the belief that invention can create a better world—and everyone has the potential to be an inventor. Tammy not only is a creative and enthusiastic engineer, but also a caring designer and entrepreneur. She created a rabbit-shaped social robot that enables children with autism to express their inner thoughts. “Developing the functionality, locomotion, and child-appealing exterior has been challenging,” she says, “but the potential to help children makes the effort very rewarding.” Tammy was drawn to the IDM program because of its mission to develop the next generation of multidisciplinary innovators, designers, and thought leaders. Her future goal is to launch a company under her own brand with a focus on designing and producing unique products that help people. “An MIT master's degree in IDM will play an essential role in helping me to achieve my dream.”
Maria Tafur

Her insatiable curiosity and preference for mechanisms led Maria to pursue a mechanical engineering degree and a master of engineering at Universidad de los Andes, Colombia. While working in the military industry supporting the production of wind- and hydro-chargers, Maria was inspired by the needs of people living in remote communities and her desire to contribute to their prosperity and growth. “Most of the people living on top of huge oil reserves are the same disadvantaged ones that inspired my work in alternative energy,” she notes. An engineer by choice, a designer by heart, and a manager by luck, she wants to dedicate her life to the art of producing appealing, functional, and accessible products. Working as a wireline engineer for Schlumberger enabled Maria to enlarge her ambition of creating a reputable brand of alternative energy products. “Curiosity and perseverance brought me to this point,” says Maria. “Through the IDM program, I will continue growing. My heart will beat in a Venn diagram at the rhythm of engineering, design, and a business plan.”

Matt Tucker

Immersed in the Harvard Business School Digital Initiative, Matt leads projects that create communities of faculty, alumni, and practitioners to better understand how digital technologies are changing the world. “With powerful, combinatorial technology accessible by so much of the world,” he says, “we find ourselves in a position to create a collaborative world unlike anything we have ever seen or imagined.” After focusing on sustainable development at UNC-Chapel Hill—and winning a rowing championship, Matt’s early positions at entrepreneurial ventures shifted his interest to new product development, which ultimately brought him to MIT. The IDM program provides Matt with the space to hone his creative skills and the room to deeply examine the new practice of creation in our networked world. By combining the two, he plans to build products that not only fit into, but also substantially improve the lives of people around the world. “Open-innovation platforms currently exist on the cutting edge with plenty of room for experimentation and massive impact. The IDM program is delivering the tools, theories, and assets I need to bring exceptional, world-changing platforms to fruition.”
Kevin Yuen

“I’m motivated to harness my passion for building new growth businesses in ambiguous and unstructured environments.” After earning degrees at the Richard Ivey School of Business and the Schulich School of Medicine and Dentistry in Canada, Kevin served at the Clinton Foundation, where he helped design solutions with global leaders to tackle social issues around the world. At Innosight, he worked as an innovation and strategy consultant partnering with clients to develop growth strategies, design new business models, and build best-in-class innovation capabilities. During his free time, Kevin prototypes protective gear for caregivers of aggressive children with autism that has been showcased at the Boston Museum of Science and featured on CNN. A former member of the Toronto Symphony Youth Orchestra, Kevin enjoys competing in national lifeguard competitions. Through all these experiences, he has learned that leading transformation requires a hybrid leadership that integrates strategic foresight with experimentation. “As I look to my future aspirations to become a chief innovation officer, I know that IDM will set me up for success. I’m incredibly excited for what the future may bring.”

Sophia Yang

Sophie is a creative problem solver who continues to discover opportunities to create more effective solutions to the problems people face every day. While studying at the Rhode Island School of Design, Sophie developed a process-driven design philosophy: ask deep questions, understand stakeholders’ needs, and work through many design iterations to reach the most effective solution. “Great products are a dance among business, engineering, and design,” she notes, “with the contributions of one flowing indistinguishably into the other.” After graduation, her passion to understand how a product ecosystem provides value to society and her goal of bringing technology closer to people led her to work as a user experience designer at Salesforce, Akamai, and Bloomberg. Sophie’s curiosity about the ever-changing technological landscape and her mission to improve the product design and development process via cross-disciplinary collaboration brought her to the IDM program at MIT. “Working with a diverse group of people interested in the crossroads of all three fields in an open experimental context allows me to develop the skills I need to become a successful, design-minded business leader.”
I truly believe a new form of leadership has emerged, more collaborative where people with different skills and backgrounds are all leaders within a team. Good communication, motivation and hard work make amazing ideas happen.

—Alicia Chong

Imagination, empathy, and intuitive leaps, combines with extensive research are essential for innovation. These have helped me identify patterns underlying the reality of human behavior, learning from reactions, probes and prototypes to design affordable, user-centric products for social impact.

—Honey Bajaj

Although the details of my professional path are constantly evolving, I hope to explore new frontiers of interdisciplinary science, foster intellectual curiosity, and encourage others to discover novel, sustainable solutions. The faculty and students at IDM challenge me to be the best leader, designer, and engineer that I can possibly be. I want to be a leader in designing solutions for social and environmental problems and I am certain that IDM will make me one.

—Sophia Yang