

Journal of Remote Sensing & GIS

# 3rd International Conference on Mechatronics, Automation and Systems Engineering Market Analysis 2020

## Alireza Heidari

Professor, Department of chemistry, USA. Email: Alireza. Heidari@calsu.us

According to technology review, a magazine focused on new technologies, published by the Massachusetts Institute of Technology (MIT), mechatronics is "one of the 10 emerging technologies that will change the world". It creates an enormous impact on the industry, economic development, and consumer products.

The most important one is that mechatronics is very interdisciplinary. It involves the areas of electrical engineering, mechanical engineering, computer engineering and computer science in an integrated fashion. AI In mechatronics market insights

The demand for artificial intelligence in mechatronics is expected to grow at a high CAGR over the forecast period. Mechatronics is an integration of mechanical engineering and electronics. Artificial intelligence has gained wide preference in the market over the past few years. The increasing need for computer systems and machines to function in a similar way as humans are expected to drive artificial intelligence in mechatronics over the coming years.

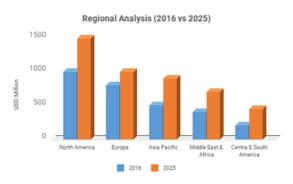
The global mechatronics and robotics courses market is expected to grow at a CAGR of more than 15%, owing to the rapid adoption of robotic and mechatronic technologies in the industrial sector, particularly in the automotive industry.



The report, Global Mechatronics and Robotics Courses Market 2017-2021 have been prepared based on an in-depth market analysis with inputs from industry experts. The report covers the market landscape and its growth prospects over the coming years. The report also includes a discussion of the key vendors operating in this market.

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In 2012, the U.S. aerospace industry contributed \$118.5 billion in export sales to the U.S. economy. The industry's positive trade balance of \$70.5 billion is the largest trade surplus of any manufacturing industry and came from exporting 64.3 percent of all aerospace production. Industry estimates indicate that the annual increase in the number of large commercial airplanes during the next 20 years will be 3.5 percent per year for a total of 34,000 valued at \$4.5 trillion (list prices).



U.S. machinery industries had total domestic and foreign sales of \$413.7 billion in 2011. The United States is the world's largest market for machinery, as well as the third largest supplier. American manufacturers held a 58.5 percent share of the U.S. domestic market. More than 1.3 million Americans were employed directly in manufacturing machinery and equipment in August 2013. These jobs are almost entirely in high-skill, wellcompensated professions and trades. Machinery manufacturing also supports the jobs of hundreds of thousands of Americans in a variety of other manufacturing and service industries.

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#### List of Major Associations and Societies on Mechatronics:

- Accreditation Board for Engineering and Technology
- National Society of Professional Engineers
- America Society for Engineering Education
- American Institute of Aeronautics and Astronautic
- American Society of Civil Engineers
- Engineering Management Career

#### Scope and Importance:

If you see the things around you, most of them are made up of the combination of mechanical electronics, and the future will comprise of the combinations of different fields, a single field can't dominate. We are entering in a Digital world in which electronics are going to play a vital role mainly in communication instruction and all other, but the actual work is going to done by mechanical machines whoever controls them. So you can now realize how much important is mechatronics in the upcoming future for at least for next 25 years till the time we develop the artificial intelligence. The industry is being constantly driven by technological developments, which guarantee higher adaptability and empower faster design. Further, manufacturers have realized advantages that 3D printing offers, such as optimizing material, labor, and transportation costs. Manufacturing units have had the option to eliminate material wastage using 3D printing.

Governments over the world have just begun putting resources into R&D on 3D printing, which has positively affected on technology propagation and adoption. For example, the Dutch government put an extra USD 150 million in 3D printing-related research and development. However, the market remains constrained by high costs of equipment needed to deploy 3D printing on an industrial scale. The absence of a worldwide principles body directing producers likewise confines the market development.

# The top three emerging market trends driving the global mechatronics, according to Technavio research analysts are:

• The increased popularity of mechatronics and robotics workshops.

- The increased popularity of task-based learning.
- The advent of modular mechatronics training modules.

### Conclusion:

Mechatronics is a rapidly growing field that integrates electronics, mechanics, pneumatics, hydraulics, and computer control systems to create new and improved automated manufacturing production systems. This conference is designed for mechanical engineers, electrical and electronics engineers, computer engineers, smart innovators, gaming professionals, design engineers, defense research professionals, and for people who are interested in plant maintenance, set up, installation, and assembly. Mechatronics 2019 is designed to reinforce the core technical skills and real-world application needed in today's manufacturing environment.